



INTERSTATE  
COMMERCE COMMISSION  
LIBRARY.  
DEC 16 1898













THE

Indexed.

MAR 11 1903

# RAILROAD RECORD:

AND

INTERSTATE  
COMMERCE COMMISSION  
LIBRARY.  
DEC 16 1898

Journal of Commerce, Banking, Manufactures and Statistics,

EDITED BY

E. D. MANSFIELD AND W. WRIGHTSON.

VOL. V.

---

CINCINNATI:  
WRIGHTSON & CO., PRINTERS AND PUBLISHERS,  
167 Walnut Street.  
1857-58.

RECEIVED  
JAN 17 1909

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO  
THE UNIVERSITY OF CHICAGO  
THE UNIVERSITY OF CHICAGO



# INDEX TO VOLUME V.

A Bill Disposing of Certain Grants of Land made to the State of Michigan for Railroad Purposes by Act of Congress.....	40	California Trade and Travel.....	419	Earnings.....	131, 134, 147, 229, 273, 398
Abridgement of Debates of Congress.....	100	Camden and Amboy.....	177	Early History of R. R.....	661, 685, 697
Abuses, Railroad, Remedy for.....	451	Canadian Railroad Legislation.....	191	Earnings of the P., Ft. W. and C.....	649
Accident on the Marietta.....	318	Canadian Investigation—The.....	227	East Pennsylvania.....	287
Accidents.....	67, 114	Canals—New York.....	558	Economy, Railroad.....	446
Act of Congress—A Bill disposing of Certain Grants of Land in the State of Michigan for Railroad Purposes, by.....	40	Capital—Adding to.....	72	Editorial Correspondence.....	351, 366
Adding to Capital.....	72	Cape Cod.....	384	Editorial Correspondence.....	751
Agriculture of the U. S.....	61	Cars—High Backed.....	350	Egypt, Railroads in.....	318
Agricultural Machinery.....	349	Catawissa, Williamsport and Elmira.....	166	Rheinberg R. R.....	424
Agricultural Statistics of the North West.....	397	Cedar Valley, Min.....	98	Electro Magnetism, New Motive Power.....	230
Alabama & Florida, 94, 146, 217, 288, 339, 399, 486, 554, 559		Celebration, The Great R. R.....	661	English Railways—What they have Cost, and what they may Earn, and How.....	591
Albany—Lumber Trade of.....	698	Central Southern.....	639	Engineer's Report, Chicago, Amboy and Upper Mississippi Railroad.....	497
Alexandria, London and Hampshire.....	131, 437	Central Ohio.....	131, 511	English Railway Traffic.....	10
Allen's Electro Magnetic Engine.....	355	Central Southern.....	185	English Railways—Revenue of.....	739
Allentown Railroad.....	566	Chartiers Valley and Hempfield.....	159	Engineer.....	397
Allowing Interest on Deposits, Mischief of.....	519	Charleston and Memphis.....	94	Erie and Little Valley R. R.....	481
American Inventive Genius.....	519	Champlain and St. Lawrence.....	131	Erie Railroad and its boasted Reform.....	446
American Speculation—English View of.....	649	Cheraw and Coal Fields.....	19	Erie Railroad and Mr. Sumner's Statement.....	536
An Australian Copper Mine.....	151	Chester Valley R. R. Penn.....	736	Erie Railroad and the Circular of the New President.....	398, 399
Androscoggin and Kennebec.....	101, 392	Chicago and Rock Island R. R.....	546, 27	Erie Railroad.....	477, 494, 510, 514, 566, 542
An English View of American Speculation.....	649	Chicago, St. Paul and Fond du Lac, 146, 290, 351, 566, 613		Erie and Sunbury R. R.—Report of for 1856.....	421
A New Route from Cincinnati to Chicago.....	759	Chicago, Iowa and Nebraska.....	394, 451, 499, 26, 334	Essex Railroad.....	37
A New City.....	674	Business of.....	435	Euphrates' Valley.....	305
A New Gold Field.....	287	Chicago, Amboy and Mississippi R. R.....	497	Evansville and Crawfordsville R. R., Third Annual Report.....	98, 590
Annual Fair of Mechanics Institute.....	478	Cincinnati and Ft. Wayne, Exhibit of.....	527	Evansville and Indianapolis Straight Line R. R.....	421
Annual Report of the Atlantic and St. Lawrence R. R. Co.....	417	Cleveland, Col. and Cin.....	131	Exhibit of the Cincinnati and Fort Wayne Railroad Company.....	527
Annual Report of Houston and Texas Central Railroad.....	447	Cleveland and Mahoning R. R.....	434, 306	Explosion of Locomotive Boilers.....	618, 632, 698
Annual Report of the Sunbury and Erie Railroad Co. for 1856.....	431	Cleveland and Pittsburgh.....	201	Extensive Railroad Pardon in Progress.....	435
Antimony, Bismuth and Cobalt.....	72	Cleveland and Toledo.....	201, 337	Fair, Annual, of the Mechanics Institute.....	478
Application of Steam Power to the Telegraph.....	678	Cleveland and Mahoning R. R.....	725	Fall of the Genesee Suspension Bridge.....	154
A Paying Road.....	559	Cleveland and Mahoning R. R.....	525	Farms and Culture—Divisions of.....	161
Arizona.....	709, 746	Coal Mines on the Pacific.....	67	Flemington R. R.....	115
Arizona—Bill for the Organization of.....	686, 689	Coal Oil and Mining Co.....	270	Florida, Atlantic and Gulf.....	251
Arterial—The Ohio Valley.....	49	Coal in Nebraska.....	547	Fond du Lac and Milwaukee.....	526
Artesian Well.....	67	Columbus Railroad Convention.....	217	Fort Wayne Western.....	193
Artificial Marble.....	414	Columbus and Hocking Valley.....	237	Foreign Commerce of New York.....	469
Ashtabula and New Lisbon.....	146	Collisions—New Railroad Signals, Preventive of.....	542	Fox Valley.....	2, 395, 360, 366, 518
Asiatic Railway.....	310	Columbia R. R., Texas.....	318	France—Science in.....	359
Atlanta and La Grange.....	101	Competition.....	477	France—Railroad System in.....	640
Atlantic and Georgia.....	654	Commercial Aspects of Cincinnati.....	477	Franklin Institute—Journal of the.....	49
Atlantic Telegraph Cable.....	343, 375, 446, 471	Comparative Advantages of Rich and Lean Ores in the Blast Furnace.....	470	Franklin R. R.....	495
Aubin's Gas Generator.....	502	Commercial Crisis of the Day.....	509	Frightful Accident on the Great Western Railway, Canada.....	50
A Word to Thinkers.....	589	Commercial Crisis—Causes, &c.....	525	Fulton and Cairo R. R.....	642
Badges—Conductors.....	366	Common Carriers.....	277	Fulton and Lyons Ferry Case.....	487
Bankrupt—on the Great Line.....	290	Commerce of the Country.....	357	Galena and Chicago Union.....	287, 319
Bank Act.....	739	Commerce of New York, Foreign.....	469	Galena and Rock Island.....	19, 64
Banks, Bank Failures, Money Currency.....	493	Commerce and Navigation of the U. S.....	637	Galveston, Houston and Henderson.....	145
Bankers Magazine.....	49	Commerce of New Orleans.....	369	Gas Flame Furnace—Beaume's.....	641
Banks of Massachusetts.....	485	Convention—Buffalo Railroad.....	310	Gas Generator, Aubins.....	502
Banking in Virginia.....	542	Conductors' Badges.....	366	Genesee Suspension Bridge—Fall of.....	154
Baltimore and Ohio, 67, 90, 105, 146, 149, 169, 194, 201, 294		Consulting Engineer.....	81	Geological Survey of Texas.....	674
Baltimore and Ohio R. R.....	566, 603	Conn. River.....	165	Georgia R. R. State Aid.....	638
Baltimore and Ohio R. R.....	423, 437, 455	Convention, Railroad, in New York.....	462	Geological Report in Relation to the soils of Ky.....	23
Baltimore and Ohio R. R. Co., Thirty First Annual Report of.....	619	Convention of Railroad Managers.....	557	Geology of the Railroads.....	163
Baltimore and Ohio R. R. Strike.....	185, 202	Copper, Manufacture of.....	91	Georgia R. R. and Banking Co.....	36
Batavia and Attica R. R.....	518	Correspondence—Editorial.....	751	Good Advice.....	151
Bay du Noquet and Marquette R. R. Surveys.....	518	Cost of Power.....	360	Gold Field—A New.....	287
Belvidere and Delaware.....	115	Cotton, Items on.....	367	Gold and Silver—Relations of.....	750
Belleville and Murphysboro.....	103	Covington and Cin. Bridge Co.....	66	Grand Trunk Railway Co.....	146, 170, 418, 580
Bessemer Iron Question.....	343	Covington and Lexington.....	675	Grayville and Mattoon R. R.....	578, 544
Bill for the Organization of the Territory of Arizona.....	686	Covington and Lexington R. R.....	721	Grand Rapids and Indiana.....	114, 117, 367
Big Sandy and Lexington R. R.....	566	Creditors of the State of Indiana to the Legislature, Memorial of.....	98	Grass's Screw Locomotive.....	186
Bonds—Missouri State.....	642	Crossing of Railroad Tracks.....	323	Grand Rapids and Northern.....	39
Borax Lakes.....	662	Cincinnati and Marietta.....	762	Great Britain, Steam Marine of.....	367
Boston and Worcester.....	100	Cincinnati and Chicago.....	82, 270, 287, 318	Great R. R. Celebration of 1857.....	661
Book-Keeping—Statistical.....	748	Cincinnati and Charleston R. R. Connection.....	498	Great Western Railway Co.—Frightful Accident on the.....	50
Buckfield Branch.....	100	Cincinnati, Cumberland Gap and Charleston.....	527, 529	Great Ohio Valley Line—The opening of.....	225
Buffalo and Lake Huron R. R.....	518	Cincinnati, Commercial Aspects of.....	477	Great Russian.....	202
Buffalo Bayou and Columbus, Texas.....	638	Cincinnati and Fort Wayne.....	115, 477, 501	Great Western Ca.....	19
Buffalo, Corning and New York.....	224	Cincinnati, Hamilton and Dayton.....	82, 130, 177, 195, 554	Guadaloupe R. R.....	435
Buffalo and New York City R. R.....	417	Cincinnati and Mackinaw.....	33, 90, 138	Hamburg and Columbia.....	304
Buffalo R. R. Convention.....	310	Cincinnati, Peru and Chicago.....	287	Hamilton and Pt. Dover, Ca.....	302
Business and R. R. Facilities of Milwaukee.....	512	Cincinnati, Wilmington and Zanesville.....	4, 82	Hannibal and Naples.....	217
Business of the Sault Ste Marie.....	259	Damages—Land.....	202	Hannibal, St. Joseph and Iron Mountain.....	715
Blue Ridge.....	338	Damages for Injuries.....	310	Harrisburg and Buffalo Bayou.....	177
Blue Ridge Tunnel.....	606	Davenport and Cedar Valley R. R.....	415	Hartford and New Haven R. R.....	510
Blue Ridge R. R. South Carolina.....	627	Dayton and Cin. Short Line.....	82	Hartford, Providence and Fitchburg.....	736
Blue Ridge R. R.....	2, 19, 119	Dayton, Xenia and Belpre R. R.....	397	Howard, Degenerate.....	469
Bridge Co., International.....	641	Debates of Congress, Abridgement of.....	100	High Backed Cars.....	350
Bridge Drill—Railroad.....	652	Debt and Finance—Tennessee.....	727	High Prices—The Day of, Influence of Railroad.....	193
Bridge—The Albany.....	386	Decision in the N. A. and S. R. R. Case.....	71, 199, 675	Hoosac Tunnel, The.....	198
Bridge at Peru—Illinois River.....	130	Decision of Judge Krebs in the Baltimore and Ohio Railroad Case.....	166	Houston and Texas Central R. R., Annual Report.....	447
Bridges over Western Rivers.....	17	Decisions, Recent.....	7, 303, 359, 41	Houston and Texas Central.....	177, 392, 503
Bridges in on Pennsylvania.....	2	Defalcation on the N. Y. Central.....	518	How a Money Panic was made in London.....	541
Bridge Decision—Important.....	515	Delaware, Lackawanna and Western R. R.....	518	How to Reform our Railroad Management.....	591
British Railway Traffic.....	547	Demolition of Property.....	17	How to make Railroads Less Unprofitable.....	553
British America—Trade of the United States with.....	177	Democratic Alliance.....	762	Hoyt's Water Gauge.....	415
Cairo and Fulton R. R.....	2, 543	Dea Jordin's Suspension Bridge.....	446	Hudson's Bay Territory.....	274
California, Wagon Road to.....	122	Detroit and Milwaukee R. R.....	479	Hudson's Bay Company.....	578
California, Overland Mail Route to.....	668	Discussion on the Joins of Railroads.....	401, 422	Hudson River.....	384, 626
		Disturbance of Suspension Bridges.....	702	Human Mortality.....	67
		Division of Farms and Culture, Ohio Farms.....	161	Illinois Southern.....	181, 397, 429, 445, 462, 651, 57
		Dressing, Budding of Ores.....	677		
		Dubuque and Pacific R. R. Land Grants.....	554, 638		
		Dust.....	350		
		Example of Railroad Losses.....	757		



Illinois River.....	195, 318	Memphis and Charleston.....	122, 135, 448, 503	Ores—Dressing and Puddling of.....	677
Illinois Central.....	67, 82, 132, 542, 553, 483	Memorial of the Creditors of the State of Indiana to the Legislature.....	98	Ores of Copper, Cinnabar, Silver, Gold, Platina, Osmium, Erbium and Palladium.....	438
Illinois River Bridge at Peru.....	130	Memphis and Little Rock R. R.....	2, 19	Ores, Rich and Lean, Comparative advantages of in Blast Furnace.....	470
Improvements in the Arts of Locomotion—Steam Vessels.....	589	Message of the Gov. of Ohio.....	701	Ores, Silver, from Gadsden's Purchase.....	461
Important Opinion of the City Solicitor—Invalid action of Council Relative to Railroad Bonds.....	545	McConnellsville, O.....	67	Ottawa and Lake Huron Canal.....	183
Important Decisions.....	70, 71, 199, 577, 675	McGregor, St. Peter and Mo.....	120, 363	Our Course.....	49
Improvement in the Manufacture of Iron.....	544, 631	Michigan Central R. R.....	201, 467, 563, 526	Overland Mail to the Pacific.....	272
Important Railroad Convention in Ohio.....	528	Michigan R. R.—Grand Rapids and Indiana R. R.....	461	Overland Mail—Protection to.....	325
Important Railroad Movement.....	418, 603	Michigan Central.....	714	Overland Route to California.....	132, 668
Important Railroad Suit.....	418	Michigan Southern.....	212	Pacific, Road to.....	18
Indiana Central.....	178	Michigan Southern and Northern Indiana.....	318	Pacific R. R. Bill.....	724
Indianapolis and Cincinnati.....	153, 503	Michigan Southern, Resignation of the President, Bonds.....	451, 453	Pacific Railroad.....	286, 303, 374
Indiana and Illinois R. R.....	393	Michigan Southern.....	519	Pacific Travel.....	495
Indiana, Railroads and Empire in.....	423	Milwaukee and Beloit.....	116, 120	Pacific Wagon Road.....	383
Injunctions.....	587	Milwaukee City Business and Railroad Facilities.....	512	Patent Office Report—American Inventive Genius.....	601
Injuries, Damages for.....	310	Milwaukee and Fond du Lac R. R.....	526	Parchment Paper.....	633
Insurance, Railway Fire.....	407	Milwaukee and Horicon Railroad, Interest on City Bonds.....	595	Parkersburg R. R.—New Channels of Trade.....	1
Insurance, The Business of.....	267	Milwaukee and Horicon.....	2, 146, 435, 445	Parliamentary Return.....	87
International Bridge Co.....	641	Milwaukee and La Crosse.....	143, 154	Past and Present.....	57
Interesting Decision to Railroad Carriers.....	523	Milwaukee and Mississippi, Earnings of.....	398, 447, 82, 146	Peat Beds in Wisconsin.....	67
Inventor's Manual.....	234	Milwaukee and Superior.....	408	Parma Railroad.....	745
Investigation, the Canadian.....	227	Mining Matters—Lake Superior.....	261	Pensacola and Georgia.....	415, 698
Iowa Central Air Line.....	102	Mines—Ventilation of.....	259	Pennsylvania and Lebanon Valley R. R.....	566
Iowa Union R. R.....	2	Missouri R. R.....	713	Pennsylvania Main Line.....	194, 269, 289
Iron Beams and Joists.....	470	Mississippi and Missouri.....	68, 257	Pennsylvania and Montgomery.....	270, 273
Iron Manufacture, Statistics of in Great Britain.....	437	Mischief of the New York system of allowing interest on Deposits.....	519	Pennsylvania—Message of the Gov. of.....	702
Iron and its Manufacture.....	502	Miss., Onachita and Red River.....	67	Pennsylvania Public Works.....	7, 146, 270, 302
Iron and Steel.....	370, 390, 406	Missouri State Bonds.....	642	Pennsylvania Relief Bill.....	556
Iron, Uses of.....	381	Mobile and Girard.....	261, 376	Pennsylvania R. R.....	727, 748
Iron Co. at Wheeling.....	67	Mobile and Ohio.....	84, 273, 415, 553	Pennsylvania R. R.....	51, 114, 594
Is Marietta to be a Switched off Town.....	371	Money Currency of U. S. Banks.....	493	Pennsylvania Railroad Co.—Monthly Statements.....	590
Items on Cotton.....	267	Money Panic in London.....	541	Pennsylvania, Suspension in.....	526
Joint Chair—Morleys.....	97	Monthly Statements Pennsylvania Railroad Co.....	590	Pennsylvania, The Canals and Railroads of the State.....	55
Joists of Railroads, Discussion on.....	401, 412	Morris Canal Co.....	151	Peoples' Bank, Louisville.....	628
Joliet and Chicago.....	195	Morris and Essex.....	270	Peoria and Bureau Valley.....	83
Journal of the Franklin Institute.....	49	Mortality—Human.....	673	Peoria and Hannibal.....	130, 149, 165
Junction of Cincinnati Railroads—Cincinnati and Wilmington Road.....	429	More Injunctions.....	387	Peoria and Ogawika.....	287
Kansas and Nebraska—Township Maps of.....	65	Murley's Joint Chair.....	57	Perdido R. R.....	98
Kentucky.....	735	Motive Powers.....	317	Permanent Way of Railways—Recent Improvements.....	71
Kentucky Central R. R. Second Division.....	495	Mr. Bancroft, on the Great R. R. Line.....	490	Philadelphia, Wilmington and Balt.....	723
Kentucky and Virginia R. R.....	626	Mr. Sumner's Statement and Erie R. R.....	526	Pike County Railroad.....	485
Keokuk and Nebraska R. R.....	535	Municipal Subscriptions.....	194	Pittsburg and Connellsville R. R.....	435
Keosauqua, Rockford and Rock Island.....	146, 320	Minnesota.....	758	Pittsburg and Connellsville.....	722
Keokuk, Mt. Pleasant and Muscatine.....	146, 148	Maryland, Railroads in.....	740	Pittsburg, Fort Wayne and Chicago.....	98, 201
Knoxville and Kentucky.....	36	Nashville and Hickman.....	130	Pittsburg, Maysville and Cincinnati.....	47
Kentucky—Geological Reports in Relation to the Soils of.....	23	Nashville and Louisville.....	556	Polytechnic College of Pennsylvania.....	413
Kentucky River Navigation.....	130	Nashville and North Western.....	2, 98, 545	Poole and Hunt's Machine Works, Baltimore.....	149
La Crosse R. R. Extension.....	434	National Association of Engineers.....	626	Port Royal R. R.....	736
La Crosse and Milwaukee.....	145, 154, 398, 437, 590	National Railroad Convention.....	463	Portsmouth and Concord.....	83
La Grange and Trenton.....	398	Navigation—Ky. River.....	130	Post Offices in the U. S.....	678
Lake Superior Items.....	503	Nebraska and Keokuk R. R.....	535	Philadelphia and Baltimore Central.....	342
Lake Superior Mining Matters.....	261	N. B. and S. W. Alabama.....	59	Preventive of Collisions, New Railroad Signals.....	237
Lake Michigan and Erie Ship Canal.....	287	New Albany and Sandusky City Junction.....	256	President's Message.....	650
Lake Erie and Michigan Transit Ship Canal.....	53	New Albany and Salem.....	270, 294, 590, 615	Production of Steel.....	726
Lake Erie, Wabash and Western.....	201	New Bridge at Peoria.....	229	Property, Demolition of.....	87
Land Culture and Land Speculations in the United States.....	190	New Channels of Trade—Parkersburg.....	1	Proposed Line of Steamers from Baltimore to the West Indies.....	736
Land Damages.....	202	New Iron Steam Ship.....	642	Progress of Locomotion.....	745
Land Grants to Iowa.....	106	New Jersey Railroad and Transportation Co.....	18	Protection to the Overland Mail.....	325
Land Grants, Duquesne and Pacific R. R.....	554	New Loan—Erie R. R.....	510	Progress of the Railway System.....	198
Land Grants to Minn.....	106	New Lishon and Ashtabula R. R.....	759	Prof. Salomon's New Machine.....	359
Lands of Illinois Central R. R.....	483	New Mexico, Interesting from.....	7	Public Domain of the U. S.....	650
Law Relative to Railroad Bonds.....	233	New Motive Power, Electro Magnetism.....	230	Public Works of Missouri.....	602
Lead at Galena, Movement of Manufacturers.....	103	New Orleans and Baton Rouge.....	198	Quarts—Liquifying.....	227
Leaks in Railroad Management.....	414	New Orleans, Commerce of.....	369	Question—Resemmer Iron.....	342
Lebanon Branch R. R.....	614	New Orleans and Great Northern R. R.....	592	Railway Loans.....	653
Lebanon Valley Railroad, Penn.....	566	New Orleans and Opelousus.....	192	Railroad Law.....	368, 577
Legislation, Canadian R. R.....	194	New Orleans and Ohio.....	177	Railroad Management.....	414, 591
Legal Decisions.....	41	New Orleans and Ponchartrain.....	102	Railroad Movement, Important.....	478, 603
Lehigh Valley R. R.....	725	New Project in Pennsylvania.....	435	Railroad Meeting.....	253
Lexington and Big Sandy R. R.....	566, 507	New Projects, Revivals, etc.....	71	Railroad Decision.....	434
Lexington and Danville.....	19, 114, 133, 177, 437	New Railroad.....	462, 546	Railroad and other Companies Suspended.....	660
Lexington and Frankfort.....	210	New Railroad Signals, Preventive of Collisions.....	287	Railroad at Ocala.....	462
Little Miami.....	38, 165, 270	New York Central.....	82, 359, 365, 368, 383, 700	Railway Project in Turkey.....	10
Little Miami and Marietta.....	66	New York Canals.....	558	Railroad Improvements Profitable.....	413, 566
Little Schuylkill Railroad and Navigation Co.....	358	New York Central.....	633, 737	Railroad Papers.....	494
Liquifying Quartz.....	267	New York and Erie.....	30, 82, 270, 383, 399, 562	Railroad Purposes—A Bill Disposing of certain Grants of Land made to the State of Mich.....	40
Locomotive Boilers, Explosion of.....	618	New York and Erie.....	711, 722	Railroad Receipts.....	560
Locomotive Engineers.....	414	New York, Foreign Commerce of.....	469	Railway Security.....	262
Locomotion—Progress of.....	745	New York and Harlem.....	3	Railroad Surveys in the upper Peninsula.....	547
Longueul Explosion—Damages for Injuries.....	310	New York, Providence and Boston.....	19	Railroad Station Indicator.....	501
London to Lahore.....	220	New York Stock Board.....	421	Railroads in the State of Maine in 1836.....	258
Lord Brougham on Accidents.....	630	Northern Central.....	19	Railway System—Progress of.....	198, 471
Lord's Detector.....	477	North Pennsylvania R. R.....	735	Railroad Service—The Mail Transportation.....	35
Louisville and Frankfort R. R.....	415	Northern Central.....	746	Railroad Supply Agency.....	193
Louisville and Newport Branch R. R.....	433	North Eastern.....	114	Railroads and Steamboats.....	665
Louisville and Nashville R. R.....	526, 662	Norman House and Park.....	309, 341	Railway System—The English.....	326
Lowell and Lawrence.....	18	North Pacific.....	145	Railroad System in France.....	640
Lakes—Borux.....	662	North Shore.....	449, 518	Railroad Suspension.....	566
Locomotive Explosion.....	698	North Western Virginia.....	335	Railroads—The Condition and prospects of.....	145
Losses of Life and Property.....	689	North West—Agricultural Statistics of.....	397	Railroads and Their Uses, Our.....	571
Lumber Trade of Albany.....	698	Notes upon the New Territory of Arizona.....	1	Railroad Tracks—Crossing of.....	323
Mad River and Lake Erie.....	18	Ourselves.....	757	Railroad Traffic—The Industrial Development in its Relation to.....	253
Mail to the Pacific—Overland.....	272	Our Railroads and their Uses.....	571	Railroads in Tennessee.....	385
Main Trunk R. R. Ga.....	485	Ocean Telegraph.....	55	Railways of the United Kingdom in 1856.....	666, 678, 691
Manufacture of Copper and obtaining Gold and Silver from Cuprous Ores.....	91	Ohio and Baltimore R. R.....	453	Route from New York to the Gulf of Mexico.....	499
Manufacture of Iron—Improvement in the.....	261	Ohio, Statistics of.....	783	Railroads, War upon and the Future.....	445
Manassas Gap.....	165, 614	Ohio Farms, Division of Farms and Culture.....	161	Revolving Iron.....	415
Map of the Territory of the United States.....	383	Ohio Life Insurance and Trust Co.....	450	Recent Improvements in the Permanent way of Railways.....	71
Marietta and Cincinnati.....	82, 647	Ohio, Message of the Gov. of.....	701	Reading R. R. Co.....	713
Marine Disasters in December.....	67	Ohio and Miss.....	82, 114, 389, 559	Reidfield's Railway Law.....	735
Marietta, Dayton Branch.....	270	On a Pacific Railroad from the Mississippi or some Point not far West of it.....	286	Relief Bill for the Banks of Missouri.....	606
Marion and Mississippi Valley.....	98, 197	One of the Leaks of Railroad Management.....	414	Relations of Gold and Silver.....	570
Marietta and Cin.....	774	On the Pacific.....	227	Remedy for R. R. Abuse—Great Western Record.....	451
Massachusetts Railroad Dividends.....	546	On Superheated Steam by Thos. Prosser, C. C.....	534	Report of the President, Northeastern R. R.....	449
Matteson and Grayville R. R.....	544	Ontario, Simcoe and Huron.....	63	Revenue of English Railways.....	501
Mayville and Lexington.....	67	Opelousas.....	21, 482	Railroad Accident.....	501
Maysville and its Railroad Bonds.....	638	Oregon.....	662	Railroad Bridge.....	518, 652
Mechanics Institute Annual Fair of.....	478				



Railroad Bonds—Law Relative to.....	233	Statement of Circulation and Value of Securities of Free Banks that are Winding up and Retiring.....	560	The Hoosac Tunnel.....	198
Railroad Companies.....	179	State Finances.....	166	The Industrial Development in its Relation to R. R. Traffic.....	253
Railroad Clearing House.....	547	State of Maryland vs. The Baltimore and Ohio.....	277	The Imperial Scheme—Russia.....	198
Railroad Chairs.....	414	Statistics of Ohio.....	733	The Illinois South. R. R.....	429
Railroads in Canada.....	273	Statistical Book-Keeping.....	793	The Iron Manufacture.....	381
Railroads in Maryland.....	740	Steel, Production of.....	726	The Monied Revolution.....	565
Railroad Celebration.....	236	Steamers from Baltimore to the West India Islands.....	736	The Main Line.....	329
Railroad Convention.....	462	Station, Railroad Indicator.....	601	The National Wagon Road.....	153
Railroad Dividends, Massachusetts.....	546	State Works.....	343	The New Territory of Arizona, No. 1.—Notes upon.....	530
Railroads—Early History of.....	661	Steam Engines, Trial of.....	501	The New York Clearing House.....	532
Railroad Economy.....	446	Steam Marine of Great Britain.....	367	The Ohio and Mississippi R. R. Co.....	633
Railroads in Egypt.....	318	Steam Ship, New Iron.....	642	The Opening of the Great Ohio Valley Line.....	225
Railroad Earnings for August.....	533	Statistics of Iron Manufacture in Great Britain.....	437	The Ohio Valley Arterial.....	49
Railroads and Empire in India.....	423	Steam Power, Application of to the Telegraph.....	678	The Planet Saturn.....	359
Railroad Fares.....	375	Steel, Iron and.....	406	The Pacific Railroads.....	305
Railway Fire Insurance.....	407	Steam Vessels, Improvements in the Art of Loco- motion.....	589	The Railroads of Maine.....	151
Railroad Facilities and Business of Milwaukee.....	572	Soules Excavator.....	553	The Silver State.....	349
Railroad from Vera Cruz to Mexico.....	625	Stocks and Bonds.....	420	The Southern Railway Movement.....	290
Railroad Iron.....	2	Stock Board.....	421, 533, 595, 560, 603, 633	The Stump House Tunnel on the Blue Ridge.....	116
Railroad Insurance.....	638	Stockholders and Directors.....	65	The Savings of Industry; or the Accumulation of Capital by Savings Banks.....	285
Railroad—Important Suit.....	418	Stocks and Stock Boards.....	162	The Mail Transportation, Railroad Service.....	35
Railroads, Illinois Southern.....	429	Stock Sales, Cincinnati.....	405, 421, 437	Thirty-first Annual Report of the Balt. and Ohio Railroad Co.....	613
Railroad, Ill. Central.....	542	Stock Subscriptions.....	664	Third Annual Report of Evansville and Crawfords- ville R. R.....	590
Railroad, the junction of the Cincinnati and Wil- mington Road.....	459	Stock Sales, London.....	405, 421, 437, 469, 485, 501, 517	To Printers.....	659
Report of the Railroad Commissioner of Tenn.....	676	Stock Tables.....	404, 420, 436, 452, 468, 484, 500, 516	Toledo and Detroit, Roads from.....	518
Researches upon the Influence of Sulphur upon Iron, and that of Phosphorus in Partially Neutra- lizing the Action of the Sulphur; by M. Janoyer, 593, 607, 619	688	Street Connection.....	382	Toledo Wabash and Western R. R. Co.....	571
Rivers, Bridges over Western.....	17	Street Railroads.....	106	Township Maps of Kansas and Nebraska.....	65
Roads to the Pacific.....	18	St. Charles Branch R. R., Mo.....	554	Trade and Revenue of the Canals.....	415
Roanoke Valley.....	68	St. Paul and Fond du Lac R. R., Chicago.....	566	Trade, The Bullion yield of the World, its Effect on.....	23
Rock Island and Alton.....	67, 98, 165, 287	St. Louis and Iron Mountain.....	270	Trade of the United States with British America.....	177
Rock Island Bridge.....	258	Subscriptions, Municipal.....	194	Transit Ship Canal, Lake Erie and Mich.....	53
Rock Island and Chicago R. R.....	546	Suez Ship Canal.....	273, 306	Trial of Steam Engines.....	601
Rock Island R. R.....	512	Sugar Prospects.....	485	Troy and Boston.....	68
Ronie R. R., Ga.....	614	Sullivan R. R.....	83	Trusting to one Man.....	170
Route to California—Overland.....	138	Sunbury and Erie.....	182, 560, 664	Trustees of R. R. in Vermont.....	655
Railroad Project in Missouri.....	578	Supply Agency, Railroad.....	193	Turpentine Manufacture.....	150
Russia—Its Population, Manufactures and Com- merce.....	269	Supreme Court, Important Decision of the.....	70	Turkey, Railway Project in.....	10
Russian Physical Civilization.....	113	Surveys in the Peninsula.....	547	Tennessee and Alabama Cent.....	710
Russia—The Area and Resources of.....	274	Suspension Bridges, Disturbances of.....	702	Tonnage Tolls.....	715
Russia—The Imperial Scheme.....	198	Suspension in Pennsylvania.....	526	Tenn. Debt and Finances.....	727
Rutland and Washington.....	37	Suspended Railroad and Other Companies.....	569	The Pacific Railway recommended by the President.....	738
Sabine and Galveston Bay.....	257, 285, 368, 483	Table of Stocks and Bonds.....	420	The President—The Pacific Railway recom'd by.....	738
Sacramento Valley.....	130, 663	Tehuantepec R. R.....	518	United States, Agriculture of the.....	81
Safety of Passengers.....	261	Telegraph, Application of Steam Power to the.....	678	Union Canal, Pa.....	41
Salem and Lowell.....	37	Telegraphs in the World.....	437	United States, Com. and Nav. of.....	637
Sale of the Philadelphia and Sunbury Railway.....	601	Telegraph Cable, Atlantic.....	446, 471	United States, Land Culture and Land Speculation.....	129
Savannah and Crawford.....	96	Tennessee and Alabama.....	210, 554	United States, Map of the Territory of.....	383
San Antonio and Mexican Gulf.....	67	Tenn., Report of the R. R. Commissioner of.....	676, 688	United States, Public Domain of the.....	650
Sandusky, Ind. and Louisville.....	319, 334	Terrible Accident in Switzerland.....	327	United States, Post Offices in the.....	678
Sandusky, Mansfield and Newark.....	20	Terre Haute and Richmond.....	659	Uses of Iron.....	381
Saturn, The Planet.....	359	Texas Central.....	272, 305	Ventilation of Mines.....	259
Sault Ste Marie, Business of the.....	259	Texas, Columbia R. R.....	542	Vermont—Trustees of Railroads in.....	655
Savannah, Albany and Gulf.....	199	Texas Roads.....	398	Verdict for Injuries.....	270
Saving Bank—The Savings of Industry; or the Ac- cumulation of Capital by.....	285	Texas, Geological Survey of.....	674	Victoria Bridge: Montreal.....	415
Sectional Map of Nebraska.....	81	The Albany Bridge.....	386	Virginia and Tennessee.....	51
Silver Ore from Gadsden's Purchase.....	461	The Area and Resources of Russia.....	274	Virginia and Kentucky R. R.....	526
Shareholders Duty.....	310	The Bullion yield of the World and its Effect on Trade.....	23	Wabash and Erie Canal.....	22
Skeel's Patent Machine for Shear Sheet Metals.....	82, 99	The Baltimore and Ohio Railroad Case—Decision of Judge Krebs.....	166	Wabash Valley.....	360, 678
Sonora Exploring and Mining Co.....	35, 60, 54, 99, 129, 164, 225, 333	The Business of Insurance.....	367	Wagon Road to California.....	122
South Atlantic Trunk Line.....	638	The Conditions and Prospects of Railroads.....	146	Weights employed in Coinage Accounts.....	482
South Carolina.....	19	The Cin. Centre of Railroads.....	97	War upon Railroads the Future.....	445
Southern and Pacific.....	60, 100, 170, 625, 687	The Canadian Investigation.....	227	Washington County—Texas.....	392
Southern Pacific Railroad and the Cin. Gazette.....	636	The Cin. Gazette and the South. Pacific R. R.....	626	Ways to the South Sea.....	134
Southern Line, Canada.....	493	The Crops and the Railroads.....	209, 301, 560	Welland R. R.....	486
South-Western R. R., Tenn.....	113, 333, 479	The Columbus Railroad Convention—The Future of California Trade and Travel.....	419	Western Division Ohio and.....	559
South-Western R. R., Ga.....	465	The Condition of the Louisiana Treasury.....	560	Westchester and Potomac.....	2
Speeds and Feres.....	365	The Coffee Trade and Culture.....	73	Western R. R. Co. Toledo.....	571
Spartanburg and Union.....	19	The des Jardin's Accident.....	114	Western Wisconsin.....	319
South Carolina Blue Ridge R. R.....	627	The Day of High Prices, Influence of Railroads.....	193	Why are not Railroads Profitable Investments.....	413
Science in France.....	359	The English Railway System.....	326	Williamsport and Elmira R. R.....	479
Scioto and Hocking Valley.....	217	The French Fraud.....	262	Wilmington and Manchester.....	51
Screw Locomotive, Grassi's.....	156	The Great Railroads and the Times.....	541	Winter Time Table.....	346
Statistics of the Agriculture of the North-West.....	397	The Galveston News and the Pacific R. R.....	177	Wisconsin River.....	217
Statistics of Births and their Relation to the Human Family—The.....	65	The Georgia.....	201	Worcester and Nashua.....	68
		The Grand Rapids and I. R. R. Co.....	257	Wrought Iron Beams and Joists.....	470
		Texas and her Railroads.....	760	Wagon Roads to the Pacific.....	654
				Wages.....	638
				Yazoo and Mississippi R. R.....	2





# Railroad Record.

E. D. MANSFIELD, - - - Editor.  
W. WRIGHTSON, Associate Editor.

CINCINNATI:  
THURSDAY MORNING,..... FEBRUARY 26, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS.	
One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to

WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—No. 1.

#### EDITORIAL.

New Channels of Trade—Parkersburg R.R. ....	1
Brevities .....	2
Ditching for Mining Purposes .....	3
Solution of Quariz for Gold Mining .....	8

#### RAILROAD DAQUERREOTYPES.

Westchester & Potomac R. R. ....	2
Milwaukee & Horicon R. R. ....	2
Fox River Valley R. R. ....	2
New York & Harlem R. R. ....	3

#### RAILROADS.

Cincinnati, Wilmington & Zanesville R. R. ....	4
The North Shore Railway .....	9
English Railway Traffic .....	10
Railway Project in Turkey .....	10

#### MISCELLANEOUS.

Pennsylvania Public Works .....	7
Interesting from New Mexico .....	7
Recent Decisions .....	7

#### MONEY AND STOCKS.

Cincinnati Stock Sales .....	8
Monetary and Commercial .....	8
Sales at the New York Stock Board .....	8

MONTGOMERY & PENSACOLA R. R.—Wm. F. Lee, Esq., formerly Assistant Engineer of the Georgia & Pensacola R. R., has been appointed Resident Engineer of the Montgomery & Pensacola R. R.

### OUR STOCK TABLE.

We have prepared with great care a table of railroad stocks and bonds from returns made by the companies to ourselves, in which we will include the length of road, capital paid in as per report, total funded debt, earnings, dividends and quotations of stock in Cincinnati and New York. The description and amount of the various mortgage and other funded debt, the rate of interest and when payable, and the quotations of sales in Cincinnati and New York. We have taken great care to get these details from the roads themselves, and believe they will be found to be of interest and importance to all who may have connections with railroads.

This table will appear in our next issue and be corrected weekly up to the Wednesday afternoon.

VOL. 5.—No. 1.

### NEW CHANNELS OF TRADE—PARKERSBURG RAILROAD.

Among the elements of future prosperity which have been relied on for Cincinnati is the opening of new lines of communication with the South. From Baltimore to the Mississippi is a vast country, covering the whole southern horizon, and comprehending within fifteen hours railroad distance full two hundred thousand square miles, which is, as yet, only penetrated by the little railroad from this city to Lexington. When we see what has been done north of the Ohio; when we see the *eight thousand miles of railroad* in Ohio, Indiana and Illinois, it excites the greatest astonishment to look on that broad southern horizon, and see so little accomplished! In less than one hundred and fifty thousand square miles on this side of the Ohio there are eight thousand miles of the best highways in the world. On the other side, in a much larger space, not five hundred! In the Atlantic Southern States, where the cotton is to be carried off, there are numerous and excellent railroads; but, while a connection with that country is very desirable, it will never minister to the growth and prosperity of Cincinnati like connection with that region immediately south of the Ohio; for the country adjacent to the Ohio is that which is *dependent* on Cincinnati for its commerce. There are no great cities on the Southern Atlantic which can divert trade from this city, and especially none which do or can manufacture. Hence, the two hundred thousand square miles of territory south of us *must*, when railroads come to traverse it, and its resources be developed, pour forth its contribution for the wealth and growth of Cincinnati. This is certain; it cannot be avoided. Cincinnati, therefore, has the greatest interest in forwarding the prosperity, and hastening the development of that country. We see that it is not developed; but we see also in that fact the greatest elements of future strength and growth for this city. It is a mine of wealth for the future; a resource as yet untouched.

To penetrate the South with railroads, from the valley of the Ohio, there are several routes; but there are only four or five which will be adopted. These are, the Baltimore route, by the valley of the Little Kanawha; that of the Great Kanawha, which, connecting with Cincinnati by Gallipolis, and with Richmond by the Central and Valley Roads, would be one of the most important lines; that of the Cumberland Gap, by the Kentucky Central, and its branch through McMinnville, Tenn.; and that of Nashville. These routes would traverse not only the great territory whose products and trade would contribute to the wealth of Cincinnati, but would connect with the system of railroads in the Southern Atlantic. We refer to the subject now, because we find one of these, and that not the

least important, completed. We mean the line from Parkersburg to connect with the Baltimore Road. We are told the Marietta line will be finished in a few weeks. These three, viz: the Baltimore, the Parkersburg and Marietta lines, will make a new and continuous route to Baltimore. It will have some advantages over any other route to the East, and will make for several years the only great line of traffic to the Atlantic portion of Maryland, Virginia, North and South Carolina. While we fully appreciate the advantages of the great routes to the East which we have had through Cleveland, Pittsburg and Wheeling, we must not overlook the fact that we have gained a new route, in some respects superior, and which, passing through a new region of country, will add to the commercial prosperity of the city. The distance from Baltimore to Parkersburg is about the same as between Baltimore and Wheeling; but the distance from Parkersburg to Cincinnati is *sixty miles less* than the distance from Wheeling to Cincinnati. This is decisive of its advantages as a through route. The distances to the leading cities of the East, when this route is complete, will be as follows:

	Miles.
Cincinnati to Boston via the New York Central .....	940
“ to New York via the New York & Erie .....	835
“ to Philadelphia via Pennsylvania R. R. ....	720
“ to Baltimore via Wheeling .....	640
“ “ via Parkersburg .....	580

By the Parkersburg route it will be *seventy-five miles nearer to New York* by way of Baltimore than by Buffalo, and will be nearer to Philadelphia than by Pittsburg. All these routes will have their local and special advantages, at different seasons of the year, and each will doubtless have sufficient business to engage all its attention and resources. It is, however, of immense advantage to an interior town like Cincinnati to have various routes to the seaboard. The healthy competition thus created will keep the carrying prices at the lowest profitable rate, and will draw out ingenuity, skill and economy in cheapening the cost of transportation to the lowest point. The immense freight business of the Baltimore Road shows that the traffic of the Ohio valley with the Eastern cities is gradually resuming its old route before the lake roads were made, but which was diverted from that channel by the fact that the route through Buffalo was long the only railroad route.

In addition to the general commercial advantages to be derived from the Parkersburg Road, is that of the local trade to be derived from an hundred miles of new road. From the river at Parkersburg to a point one hundred miles east of it the road traverses a section of country which had before no means of conveyance but common wagon roads. This country will, no doubt, trade largely with Baltimore; but there are numerous articles which can be better furnished from Cincinnati than any other point. In fact the whole



of Western Virginia must eventually trade largely with Cincinnati. The Kanawha valley now does almost entirely; and, as railroads extend, this local traffic will be extended into large portions of the Carolinas and Tennessee. The mercantile interest of Cincinnati should cultivate the friendly feeling and commercial affinities of that section with all proper care.

In connection with this subject we should say that sooner or later the Ohio river should be bridged at or near Parkersburg, for railroad traffic; and public opinion should oblige the great railroad companies whose object it is to connect there to come to an amicable understanding on the shortest and best point for the public convenience.

While year after year thus adds to the commercial facilities of Cincinnati, we may anticipate her growth and prosperity to increase. Her march is onward, and is not likely to be arrested short of imperial proportions.

#### RAILROAD BREVITIES.

—BLUE RIDGE R. R.—The appeal to the citizens of Charleston in behalf of this road has enlisted the sympathies of the capitalists of that place.

—DUTY ON RAILROAD IRON.—A resolution has passed the Senate of Pennsylvania instructing its representatives to vote against the reduction or abrogation of duties on railroad iron.

—CAIRO & FULTON R. R.—This company have been actively engaged in getting subscriptions to their stock. At a meeting recently held at Little Rock \$10,000 was subscribed.

—BRIDGES IN PENNSYLVANIA.—The following is a bill on this subject now before the Legislature of Pennsylvania:

[No. 138.]

#### AN ACT RELATING TO BRIDGE COMPANIES.

*Be it enacted, &c.,* That no act of incorporation or charter heretofore granted by the Legislature of this Commonwealth, or that may hereafter be granted to any bridge, railroad or other company, or to any individual, shall be so construed as to authorize the placing of any such erection, edifice, pier, or abutment in and upon the Youghiogheny, Monongahela, Allegheny or Ohio rivers, or their tributaries, declared navigable by law, or the banks or shores thereof, as will hinder, impede or interrupt the navigation of the same, or endanger rafts, coal-boats, steam-boats, and vessels of every kind, or any other craft used in the navigation of the same, or in the transportation of goods and passengers thereon; and all courts having equity jurisdiction may upon application to them, made for the purpose, perpetually enjoin all such obstructions on the several rivers in this act mentioned as are within their respective jurisdiction.

—YAZOO & MISSISSIPPI R. R.—A bill has passed both branches of the Legislature of Mississippi chartering a company to build a

railroad from Skipwith's Landing, on the Mississippi river, to Yazoo City, and thence to some suitable point on the Mississippi Central R. R. It is said that the enterprise is in the hands of those who will push it through.

—MEMPHIS & LITTLE ROCK R. R.—The Common Council of Memphis have passed the Ordinance granting aid to this road over the Mayor's veto.

It is stated that a company has been formed in Memphis to undertake the grading and placing cross-ties on the road from Hopefield to Little Rock.

—NASHVILLE & NORTH-WESTERN R. R.—It is stated in the Hickman *Argus* that Messrs. Beekel & Rust have given up their contract on this road.

—IOWA UNION R. R.—The sum of \$25,000 was subscribed in Iowa City by six persons toward building a railroad from Iowa City to Cedar Rapids.

### Railroad Engravingtypes.

#### No. XLVII.

#### WINCHESTER & POTOMAC R. R.

##### OFFICERS.

President—WM. L. CLARK, Winchester.

Treasurer and Secretary—J. G. HIRT, Winchester.

Superintendent—JAS. MAGAHT, Winchester.

The CAPITAL STOCK is as follows:

Number of shares.....72,000.

Price per share.....\$25.

##### RUNNING EQUIPMENTS.

Number of Locomotives.....6.

Passenger cars.....4.

Baggage ".....2.

##### DETAILS OF CONSTRUCTION.

Length of road.....32 miles.

Gauge.....4 feet 8½ inches.

Single track.....32 miles.

Sidings.....3 "

Length of rail.....20 feet.

Weight per yard.....19 lbs.

Kind of iron.....American.

When laid.....1836.

Kind of rail.....1 by 2½ flat.

Length of rail.....15 to 20 feet.

Ties.....White Oak.

Length.....8 feet.

Size.....8 inches.

Ballast used.....Stone.

Kind of fuel.....Wood.

#### No. XLVIII.

#### MILWAUKEE & HORICON R. R.

The report of this road is dated November 24, 1856. The following are its officers:

President—JNO. B. SMITH, Milwaukee.

Treasurer—DAN'L H. RICHARDS, "

Secretary—J. N. MASON, "

Superintendent—JESPER VLIET, "

##### DIRECTORS.

J. B. SMITH,

D. H. RICHARDS,

GARRET VLIET,

JESPER VLIET,

J. BOWEN,

J. F. HEAZLITT,

JESSE ALVORD.

The ANNUAL MEETING of the stockholders is held on the first Wednesday in January.

The DEBTS of the road are:

1st mortgage.....\$420,000.

Interest.....8 per cent.

When due.....1st May, 1852.

Interest Payable.....1st May and Nov.

Trustee.....Robert H. Lowry.

##### RUNNING EQUIPMENTS.

No. of locomotives.....5.

Passenger cars, 1st class.....3.

Baggage ".....2.

##### DETAILS OF CONSTRUCTION.

Length of road.....30 miles in operation.

Termini.....Horicon and Ripon.

Gauge.....4 feet 8½ inches.

Single track.....30 miles.

Sidings.....About 2 miles.

Road opened for business to Wampum, fifteen miles from Horicon, the point of connection with LaCrosse & Milwaukee Railroad Company, on the 15th of February last; to Ripon, 30 miles from Horicon, on the 15th of Nov.

#### No. XLIX.

#### FOX RIVER VALLEY R. R.

The report of this company is dated Dec. 1, 1856. The following are its officers:

President—B. W. RAYMOND, Chicago.

Treasurer—M. C. TOWN, Elgin.

Secretary—A. J. WALDRON, "

Sup't—G. H. MERRITT, "

##### DIRECTORS.

B. W. RAYMOND,

J. P. YELVERTON,

JOHN B. TURNER,

M. C. TOWN,

JOS. TIFFT,

B. TRUESDELL,

A. EDWARDS,

J. A. CARPENTER,

H. N. OWEN,

GEO. GAY,

W. A. MCCONNELL,

C. M. GOONSELL,

MILO SMITH.

The ANNUAL MEETING of the stockholders is held on the 22d of September.

The CAPITAL STOCK is as follows:

Number of shares.....2,000.

Price per share.....\$100.

Capital.....\$200,000.

The DEBTS of the road are:

1st mortgage.....\$400,000.

Interest.....7 per cent.

When due.....1864.

When payable.....1864.

Trustees.....J. P. Yelverton & P. R.

Kearney, N. Y.

2d mortgage.....\$200,000.

Interest.....10 per cent.

When due.....1876.

When payable.....1876.

Trustees.....J. P. Yelverton & P. R.

Kearney, N. Y.

Floating debt.....\$20,000.

##### RUNNING EQUIPMENTS.

Number of Locomotives.....4.

Passenger cars, 1st class.....2.

Baggage ".....2.

##### DETAILS OF CONSTRUCTION.

Length of road.....33 miles.

Termini.....Elgin and Richmond.

Single track.....3 miles.

Weight per yard, rail.....56 lbs.



Kind of iron.....English.  
When laid.....1854-5.  
Kind of rail.....H.  
Ties.....Oak.  
Ballast used.....Gravel.  
Fuel.....Wood.

## No. L.

## NEW YORK &amp; HARLEM R. R.

The report of this company is dated September 30, 1856. The following are its officers:

President—PHILO HURD, New York.  
Treasurer—WM. A. WHITEHEAD, New York.  
Secretary—WM. H. EMERSON, "  
Sup't—WM. J. CAMPBELL, "

## DIRECTORS.

PHILO HURD,  
WM. C. WETMORE,  
HORACE BROOKS,  
PHILIP DATER,  
EDWIN CROSBY,  
FRANCIS W. EDWARDS,  
ALBERT J. AIKEN,  
ALBERT SMITH,  
SAM'L T. TABER,  
NATH. T. BAILEY,  
EDW'D HAIGHT,  
THOS. H. FAILE,  
JNO. H. GOURLIE.

THE ANNUAL MEETING of the stockholders is held on the third Tuesday in May.

THE CAPITAL STOCK is as follows:

Number of shares.....84,342.  
Price per share.....\$50.  
Capital.....\$5,717,100.

THE DEBTS of the road are as follows:

1st mortgage.....2,336,000.  
Interest.....7 per cent.  
When due.....May and Nov.  
When payable.....1873.  
Trustees.....R. M. Blatchford and T. W. Ludlow.  
2d mortgage.....\$936,000.  
Interest.....7 per cent.  
When due.....February and Aug.  
When payable.....1864.  
Trustee.....Farmers' Loan & Trust Co.  
Other Bonds.....\$470,000.  
Interest.....7 per cent.  
When payable.....1859 to 1872.  
Other Bonds.....\$91,304 71.  
Interest.....6 per cent.  
When payable.....1858.  
Floating debt, including mortgages in real estate.....\$440,664 26.

## RUNNING EQUIPMENTS.

Locomotives .....36.  
Passenger cars, 1st class 65.  
City cars, 4 wheels.....37.  
Baggage & Exp. cars.....11.  
Freight cars.....355.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends September 30:

## RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$520,630 60	524,047 93	520,527 20
Freight.....	329,076 36	424,780 16	436,245 09
Mails.....		8,092 37	8,091 38
Express.....	84,403 56	2,383 27	3,013 30
Miscellaneous.....		76,258 72	72,516 27
Cost of operation.....	\$787,540 56	801,451 70	715,501 67

## DETAILS OF CONSTRUCTION.

Length of road.....130.75 miles.  
Branch.....2.25 "

Termini, main line.....New York & Chatham.  
" branch.....Melrose & Port Norris.  
Single track.....101.913 miles.  
Double track & sidings. 30.962 "  
Weight per yard, rail.....50 to 60 lbs.  
Kind of Iron.....English and American.  
When laid.....1852 to 1856.  
Kind of rail.....H.  
Fuel.....Wood.  
Cost per annum.....\$103,979 36.

## DITCHING FOR MINING PURPOSES.

The most successful gold mining is at present performed by what is called the hydraulic hose process, which consists simply in conveying the water in canals or ditches, and over valleys in flumes supported on tressel-work, to the place where the gold deposits lie. The water should be from forty to one hundred feet above the ground to be washed. It is let down in wooden trunks for a part of the way, and then discharged through hose pipes from an orifice of about one inch in diameter. The man who holds the end of the flexible pipe directs it against the earth to be washed. Under a pressure of fifty or sixty feet, the water shoots out with great force, and with surprising rapidity cuts down the most compact clay, and even the softer rock, and carries them away with its current, leaving the gold along the sluices, where it settles, from its superior specific gravity, and from which it is easily taken out. Though the bed of earth above the deposit may be more than twenty feet thick, it presents no serious obstacles. The stream from the pipe is directed at its base, just where it rests on the rock, and as it cuts away the foundation, the superincumbent mass falls down, and, crumbling under the force of the jet, is rapidly dissolved and carried away. By this means not only the gold in the deposit of gravel is obtained, but likewise all contained in the overlying mass of earth, which was entirely lost under the old system of working. A single pipe, in the hands of a boy of fifteen years of age, will, in this way, generally do the work of twenty able-bodied men operating as formerly, with the pick and shovel.

The capacity of ditches for this purpose is thus given by Charles Elliot, Jr., in reply to an interrogatory of Mr. Clingman:

The canals of which Mr. C. speaks should be placed on the highest level the ground will permit; that is to say, the slope of the canals should generally be very small, and the power of the water should not be wasted in a swift descent, in the hope of economizing in the cost of construction.

A good wide ditch, over rough ground, will cost very little more than a small one of the same depth.

The power of water is generally the product of the fall, or *effective* head, into the volume discharged. But, in this particular application, I cannot admit that principle, and am of opinion that, the head being constant, the effect will depend much on the mass of water discharged by a single pipe. In other words, that it will be found better to discharge through the largest manageable orifices—that a greater

effect will be produced by the column discharged from one pipe of two inches bore than by those from four pipes of one inch bore, though the volume and velocity are the same in each case. To obtain good results require large, concentrated masses of water.

It makes no difference whether the conducting pipes leading from the canal to the urifices of discharge are perpendicular, or follow the slope of the ground. At least, the difference can be reduced to a very small quantity. What is required is simply very large pipes to convey the water from the canal to the orifice of discharge.

If these pipes are of leather, canvas, or gutta percha, they may burst, if made large; or they will offer a great resistance to the flow of the water through them if they are too small. But this is a practical difficulty easily overcome by substituting castor wrought iron screw pipes for this purpose, which can be put together very rapidly, and shifted about easily.

The lower end of these screw pipes should be furnished with screw nipples, upon which the hose could be readily attached. They should be furnished with a cock, also, for shutting off the water.

The following calculations meet the cases submitted by Mr. Clingman, assuming his canals to be of rectangular sections:

Canal 3 feet by 3 feet.

Slope 2 feet per mile—mean velocity 1.7 feet per second.  

" 4 "	" "	" 2.5 "
" 6 "	" "	" 3.2 "
" 8 "	" "	" 3.7 "

The volumes delivered by this ditch, and with these slopes, will be—with slope of

2 ft. per mile— $1.7 \times 9 = 15.3$  cubic ft. per second.  

4 "	$2.5 \times 9 = 22.5$ "
6 "	$3.2 \times 9 = 28.8$ "
8 "	$3.7 \times 9 = 33.3$ "

But if the dimensions of the ditch were six feet by three feet, the results would have been, for the velocity:

Slope 2 feet per mile—velocity 2.1 feet per second.

" 4 "	" "	" 3.1 "
" 6 "	" "	" 4.0 "
" 8 "	" "	" 4.6 "

And the volumes delivered by this ditch would be—with slope of

2 ft. per mile— $2.1 \times 18 = 37.8$  cubic feet per sec.  

4 "	$3.1 \times 18 = 55.8$ "
6 "	$4.0 \times 18 = 72.0$ "
8 "	$4.6 \times 18 = 82.8$ "

Mr. Clingman should observe particularly these facts, viz:

The larger ditch, six by three, with a fall of only two feet per mile, will convey thirty-eight cubic feet of water per second.

The smaller ditch, three by three, with a fall of eight feet per mile, will only convey thirty-three cubic feet per second.

The large ditch with the small fall carries some 15 per cent. more water than the small ditch with the great fall.

Again: the total head to be used is supposed to be 100 feet, and the length of canal 10 miles.

The larger ditch, with a fall of two feet per mile, delivers its water at an effective height of

$$100 - 10 \times 2 = 80 \text{ feet.}$$

The smaller ditch, with a fall of eight feet per mile, delivers its burden at an effective height of

$$100 - 10 \times 8 = 20 \text{ feet.}$$

If I wished to compare the relative powers of the water borne by these two ditches, I should express them by the products of their respective volumes into their effective heads;



assuming, of course, that the water in each case would be discharged through orifices of equal size.

The power of the smaller ditch would be expressed by  $33 \times 20 = 660$ .

The power of the larger ditch would be expressed by  $38 \times 80 = 3040$ .

The larger ditch would therefore do more than four and a half times as much work as the smaller one—though it is only twice as large as the smaller.

The discharge of a round orifice, one inch in diameter, under

A head of 30 feet will be 147-1000 of a cubic foot per second.

A head of 60 feet will be 215-1000 of a cubic foot per second.

A head of 80 feet will be 240-1000 of a cubic foot per second.

A head of 100 feet will be 267-1000 of a cubic foot per second.

A ditch of rectangular section six feet wide and three feet deep, with a slope of two feet per mile, would deliver, as above, 38 cubic feet of water per second. As each pipe with a head of 80 feet would discharge 240-1000 of a cubic foot per second, this ditch would keep in action  $38 \times 1000 \div 240 = 160$  pipes of one inch bore.

This system of working the gold mines must be very effectual; but a great deal of its success will necessarily depend on the skillfulness of the entire arrangement.

In my opinion, every care should be observed to convey the largest mass of water attainable, to deliver it at the greatest possible height, and to discharge it against the soil to be washed through the largest manageable pipes.

There are many practical questions connected with this business which should be considered; but they depend for their solution on the shape of the ground, &c.

Some allowance must be made in the calculations for the necessary loss of water on the way from the stream to the diggings; but this loss will depend on the character of the soil.

If the soil is argillaceous it would be advisable to form basins on the line of the canal, wherever it can be done without adding materially to the cost.

The water ought not to be drawn directly from the shallow canal into the pipes which convey it to the orifices of discharge. There should be interposed a large iron pipe, or a penstock; or the canal, if the ground permit, should be made very deep at that point, so as to force the water into the pipes under a sufficient head.

Short bends in the pipes should be avoided. The larger the pipes, and the clearer they are kept from all sorts of obstruction, the more violent will be the discharge, and the better the results.

It is not improbable that it will be found advisable to place the branch or discharge pipes on a *rest*, and handle them by some simple machinery, so as to permit the nozzle of each pipe to be put very close to the soil—nearer than a man could safely stand. Under such heads as we are considering, and with such a column as I would use, gravel and large stones will be scattered about with great and dangerous violence. In fact, it is the difficulty of standing near enough to handle the pipes, which will be likely to put a practical limit to the column and the velocity of discharge.

The canal should be allowed to spread out into basins wherever the shape and character

of the soil will permit it. These wide places will serve as reservoirs, and frequently save much water.

The cost of iron pipes in Philadelphia will be about as follows:

WROUGHT IRON SCREW PIPES.	
1½ inches diameter.....	24 cents.
2 " " ".....	40 " }
2½ " " ".....	68 " } per lineal foot.
3 " " ".....	100 " }

CAST IRON PIPES, SCREW JOINT.	
1½ inches diameter.....	25 cents per foot.
2 " " ".....	32 " "

CAST IRON PIPES, WITH LEAD JOINTS.	
3 inches diameter.....	20 cents.
4 " " ".....	50 " "
10 " " ".....	125 " "

I will merely add that the dimensions of the canals which I have assumed for illustration are those selected by Mr. Clingman, but that in constructing such works the ditches will not be rectangular, and that the shape of their outlines will vary the results.

## Railroads.

### CINCINNATI, WILMINGTON & ZANESVILLE RAILROAD.

We are in receipt of a circular addressed to the bondholders, creditors and stockholders of this company by Mr. Gest, the present President and Superintendent, from which we make such extracts as will give a full idea of the position of the company and its proposed plan of operations.

Mr. Gest says:

"The immediate and nearly total suspension of the payment of interest and principal on the floating debt of the company that followed my acceptance, on July 24th last, of the position of President and Superintendent—the failure on the 1st of November to pay the coupons on that day due—the expiration of the sixty days' grace allowed by terms of mortgage before forfeiture—with the fact that the report dated May 1st, 1854, is the only one ever published—indicate the necessity for anticipating the regular annual report of the Board of Directors to the stockholders.

"The company derived its title and corporate powers by special act of the Ohio Legislature, dated February 4th, 1851, which act refers to and makes the General Railroad Law of that State, dated February 11th, 1848, with the several amendatory acts thereto, the fundamental law of the corporation, and invests it with all the rights, privileges and franchises necessary for the construction, maintenance and operating of a railroad from the city of Cincinnati to the city of Zanesville, in said State. In May of the same year the company was organized.

"In November, 1851, the section of the road between the town of Morrow, on the Little Miami Railroad, thirty-six miles distant by said railroad from Cincinnati, to the city of Lancaster (eighty-nine miles), was placed under contract; and in January, 1853, the section between Lancaster and Zanesville (43 miles) was also let.

On the 11th of August, 1853, the section between Morrow and Wilmington (20 miles) was opened for traffic; on the 24th of November, for the further distance of twenty miles to Washington; on the 14th of March, 1854, to Circleville; on the 11th of April to Lancaster; and about the 1st of May, 1856, to the junction with the Ohio Central Road, in Zanesville. In all, 131½ miles. On the section between Morrow and the city (30 miles) nothing had been done, nor had any efforts been made to provide for its construction, until after the opening of the road to Zanesville.

"So far as it is possible to judge by merely riding over the road, and without the maps made from the preliminary surveys, the line appears to be well located; and for all practical railroad purposes may be said to be the same as a right line. 88 per cent. of its length is made up of tangents. On the remaining twelve per cent. there are no objectionable curves.

"As to grades it is equally favorable, unless the two grades of fifty-five feet per mile, which occur on the twenty-one mile section, between Circleville and Lancaster, are considered objectionable. Should they prove so, in the future working of the road, they are so situated that by using an assistant engine, trains loaded to the maximum, for the other sections of the road, can be made to pass them without detention, and at a small additional expense.

"The road bed was intended to be graded fifteen feet wide on embankments and twenty feet in excavations, at sub-grade—the slopes of banks and excavations being one and a half feet base to one vertical. Generally these dimensions were adhered to, and the road bed finished accordingly, excepting immediately at the approaches of some of the bridges, where trestling was resorted to, and at a few of the heavier cuts on the eastern twenty miles of the road, where the slopes were left standing, and some two or three places in embankments where the same was not filled up to grade. From the steepness of the slope thus adopted, a few slips have occurred; and where the embankments are high, the width at top has been reduced by abrasion so much that more or less widening of these banks will be required during the coming two years. With the exceptions stated, and a moderate amount of additional side-track grading, the grading of the road bed from Morrow to Zanesville may be said to be complete. Five thousand dollars expended during the next three years, together with that which will be necessarily done by the ditching train during the same period, will complete the grading of the road bed.

"Most of the small water passages are of stone, and, with two or three exceptions, are in good order. There are fifty-five regular



truss bridges of wood—Howe's plan. Of these, seven are deck, thirty-five through, twelve low truss, and one draw. Their aggregate length is seven thousand two hundred and seventy-seven feet. There are also fifty-six small girder bridges, measuring in length eighteen hundred and fifty-eight feet, and varying in span from five to thirty feet. Nine of the truss bridges and forty-six of the girder are supported with wooden bents.—These bents should be replaced with stone abutments and piers as they fail, and will require about forty-five hundred perches of masonry, at a cost of \$24,500. This expenditure will extend through the next five years.

"The superstructure of all the bridges may be said to be in a fair average condition, and will require only the ordinary repairs incident to similar structures.

"There are wanted three or four sluiceways; also some extra ditching alongside of the road, to prevent future overflow of the track and inundation of adjoining lands.—\$5,000 will cover this item.

"There are six hundred and fifty-nine lineal feet of trestle work distributed at nineteen points; generally, however, forming approaches to bridges. They should be replaced with earth banks, as they decay; to do which will require an expenditure of \$4,000.

"With the exception of twenty miles, the road bed is ballasted, in whole or part. The amount of ballast yet required to complete the entire length and replace ballast spoiled by the track-men, or of an improper character, is estimated to be equal to one-half of the entire amount on the whole road when completed, and will require an expenditure in the next two years of \$31,200.

"The ties are generally of white and burr oak, will average two and a half years old, and the time is fast approaching when constant regular annual renewals will be required.

"The chairs are of wrought iron, of the ordinary weight and pattern.

"The iron is of the ordinary American pattern (inverted T), weighing 60 lbs. to the yard. The larger portion is of European manufacture, and has proved of superior quality. That on the forty-two miles east of Lancaster is of American manufacture. This not having been a great while in use, its quality cannot be so well judged.

"The side-tracks are sufficiently numerous; but, unfortunately, are either not long enough, in the wrong place, or badly arranged. They require more or less shifting, and should be forthwith increased in length and connected at both ends (many of them being spurs). To do this work will require two hundred and fifty tons of iron, which, with the other fixtures, grading and labor, will cost about \$22,000.

"The accounts of the company not having been kept under proper heads for railroad purposes, the erroneous distribution of the various items of which they are composed, with the inaccuracies that pervade them, will account for any unusual features or discrepancies that may appear. By way of extenuation, I will here state that I have discovered nothing to lead me to question their integrity. On the 1st of November a new set of books were opened and the old ones closed, excepting for business pertaining to the perfecting of all old matters appearing on their face.

*Balance Sheet, as per old Books, Nov. 1st, 1856.*

ASSETS.	
Capital stock.....	\$1,761,149 16
1st mortgage bonds.....	1,300,000 00
2d do do.....	532,000 00
3d do do.....	104,000 00
Income do.....	305,500 00
Bills payable.....	345,932 20
L. M., C. & X. R. R. Co.....	11,394 82
Other railroads.....	1,939 73
Profit and loss.....	740 07
Due individuals.....	63,455 60
Trans. receipts.....	398,173 61
	<b>\$4,824,285 19</b>
LIABILITIES.	
Right of way.....	\$ 79,696 19
Real estate.....	25,985 22
Fencing.....	6,069 25
Construction.....	2,012,003 26
Bridges.....	60,300 37
Iron, spikes and chairs.....	733,814 26
Machinery and cars.....	326,732 33
Depots.....	25,472 68
Machine shop.....	19,090 13
Telegraph.....	6,282 50
Engineering.....	51,816 18
Loss on bonds and stock.....	637,198 12
Coupon and other interest.....	402,527 49
Commissions.....	22,368 70
Contingent expense.....	13,759 48
Transportation do.....	330,904 19
Bills receivable.....	2,052 10
Individual account, &c.....	45,500 49
Nominal do.....	12,712 05
	<b>\$4,824,285 19</b>

The total earnings of the road have been as follows:

1854, January to July.....	\$40,079 32
1854, July to January.....	55,544 56
1855, January to July.....	48,769 60
1855, July to January.....	66,584 85
1856, January to July.....	94,507 24
1856, July to January.....	126,984 72
	<b>\$443,249 29</b>

The expenses of operating for the same period have been, \$333,522 09.

The following statement shows the amount of bonds created under the several mortgages and resolutions of the company, the number sold, hypothecated, or in the hands of agents:

Class.	Amount.
1st mortgage, dated April 15, 1852.	
Sold.....	\$1,300,000 00
2d mortgage, dated Feb. 13, 1854.	
Sold.....	\$532,000 00
In hands of Agents.....	25,000 00
Hypothecated.....	25,000 00
Unaccounted for.....	17,000 00
3d mortgage.	
Sold.....	\$104,000 00
Trust bonds, "Tres,".....	100,000 00
Hypothecated.....	896,000 00
Income Bonds.	
Sold.....	\$305,500 00
J. Radabaugh, Tres.....	150,500 00
do not filed up.....	204,000 00
In hands of Agents.....	5,000 00
Hypothecated.....	535,000 00
Total amount authorized.....	<b>\$4,200,000 00</b>

The capital, representing the entire property of the corporation, is made up of the following items:

By 1st mortgage bonds.....	\$1,300,000 00
2d do do.....	532,000 00
3d do do.....	104,000 00
Income do.....	305,500 00
Bills payable.....	345,932 20
Amount due railroad, as per books.....	13,734 55
Amount due individuals.....	63,455 60
Claims on file, not yet adjusted or recognized, estimated at.....	16,000 00
Claims for cattle killed, do.....	7,500 00
Capital stock.....	1,761,149 16
Interest due on capital stock, estimated at.....	289,500 00
Coupon interest past due, including the interest on Clinton Co. bonds, estimated at.....	120,000 00
Interest on bills, &c., past due.....	25,000 00
	<b>\$4,882,271 51</b>

"To which is to be added the following sums, before the 132 miles of road may be said to be finished, and the capital account of the company closed, should it from any cause not be completed into the city of Cincinnati, according to the original intention of its charter and projectors:

For grading.....	\$ 5,000
Culverting and bridging.....	24,500
Ditching and sluices.....	5,000
Trestle work.....	4,000
Ballast.....	31,200
Three miles siding.....	22,000
Unsettled rights of way, estimated at.....	15,000
Fencing.....	45,000
Buildings.....	10,000
Wood sheds.....	12,000
Machine shops and engine houses.....	10,000
Telegraph.....	6,000
Locomotives.....	80,000
Cars for coal and freight.....	10,000
Real estate.....	15,000
Second class and baggage cars.....	7,000
Light passenger cars.....	16,000
Sundries.....	10,000
	<b>427,900 00</b>

Or per mile \$40,705, or for whole 132 miles, \$5,390,271 51

Of that sum there will be represented by stock.....\$2,050,649 16  
Do, bonds and debts.....3,569,622 35

"Rating the interest on entire indebtedness, i. e., on \$3,269,622 35, at 7 per cent. makes the sum of \$228,873 56. And estimating the cost of working at 45 per cent. of the gross receipts, will require an earning of \$416,132 68, or per month of \$34,677 60.

"The advantages of the extension are many and unequalled.

"1st. It penetrates directly into the city—the depot abutting on Broadway, near Court street—and thence will be able to discharge and receive its freights and passengers almost at the center of business, and in a pleasant part of the city. Within an average distance of 800 feet of the end of the depot every winter is the product of 400,000 hogs prepared for market. The principal basin of the Miami Canal terminates within 150 feet of the end of the building, and at an expense of \$6,000 a slip could be constructed into the depot, and boats unloaded or loaded alongside of the cars. This canal also brings to Cincinnati an amount of hog product but little inferior to that prepared in the city, besides large quantities of flour, whisky, and other products. Thus in the immediate vicinity of the depot are accumulated immense masses of produce; nearly all of which is destined to foreign market. The saving on the drayage alone, in Cincinnati, on these products shipped at this depot, will equal 33 cents per ton on that incurred if shipped at the Little Miami depot, the next most favorably situated.

"2d. The depot grounds are so situated that not a street or alley, or other public ground,



will be touched by the works of the road; consequently no municipal control can extend to the regulation of the speed of its trains. This feature, in addition to the fact that for four miles out there is not a road crossing on a level with its rails, will enable the trains to be worked at any speed desired. This peculiarity, in connection with the saving in distance between Cincinnati and Morrow over the Little Miami Road of five miles of railroad and from a quarter to half a mile of city omnibusing, will enable express trains, running at 30 miles an hour, to be in Morrow by the time those on the other road are fairly free of municipal control; in other words, be a saving of full one hour's time whenever the municipal regulations are fully enforced.

3d. The road at Sharon, being in the valley of Mill Creek, allows, by a line of easy construction two miles in length, a connection to be had not only with the Miami Canal, but also with the Hamilton and Dayton Railroad, near Glendale, and through that road with the several railroads passing into Indiana from Hamilton. This will be better understood by referring to the local map of southwestern Ohio, accompanying this report.—Through these two connections the supplying of coal to the Great Miami valley and eastern Indiana will be secured to our road. Again, produce coming by these same avenues, destined for an eastern market, would be transferred to our cars at the points of junction, and thus the expense of transportation to and cartage through the city avoided. In fact, our road would monopolize that class of trade, as well as the merchandise and wares coming from the East in exchange for these products.

4th. These depot grounds are so capacious, that about five acres can be spared for coal purposes, and so situated that the floor of the yard can be fixed at a level of 35 feet below the track, and thus afford all the facilities for storage necessary to enable the Railroad Company to do the business at a rate which ensures her a business, the value of which is set forth in a subsequent article on the coal trade.

"With this extension completed, the Company will have a railroad 162 miles long, the cost of which, with the coal equipment, will not exceed eight millions of dollars. Three millions of that sum will be represented by stock, and five millions by bonds, (assuming that the hypothecated bonds will be restored to the company's control). The amount required to pay the interest on the bonded debt, and a similar interest of 7 per cent. to the stockholders, will require an annual earning of \$1,120,000, estimating working expenses at 50 per cent.

"It seems necessary for me here to remark, that the road passes for the entire distance, over a country of extraordinary fertility, under a high state of cultivation, free

from miasmas or other deleterious atmosphere, antagonistic to health. Although partially through a grazing country, yet large quantities of surplus cereals are grown for foreign market, and generally the country will afford the usual proportion of freights and passengers, and the thirty miles next the city an unusually large proportion of the latter. Already are springing up along the line buildings for manufacturing purposes, and the trade rapidly conforming to this new channel to market.

"The eastern forty miles of the road lies in a bituminous coal field. A number of mines in Perry county are now being worked, and the coal from the best of them has been tried by manufacturers and families, and pronounced for most purposes to rank second only to the best Youghiogheny. The average distance of these mines will be about 140 miles from this city.

"Assuming the road completed into the city, and applying the same rules of estimate for local business—and the estimate heretofore explained for the coal transportation—with a fair allowance—say per 20 cent. on local business for through traffic, (a per centage which would be beyond all doubt realized,) the revenue for the first year would then be as follows, (the population being estimated at 433,483, which is 20 per cent. increase over that of 1850, and the same as allowed in the other estimate):—

From produce, merchandise and passengers local.....	\$953,662 60
From coal delivered in city and Mill Creek valley.....	300,000 00
From coal local.....	30,000 00
Through business.....	190,732 00

Gross earning.....\$1,474,394 60

"A sum sufficient to pay working expenses, (50\* per cent.), and 7 per cent. on the bonded debt of \$5,000,000—and a like interest of 7 per cent. on the stock, \$3,000,000—with a surplus fund of \$177,197 30.

"The actual cash required by the Tunnel Company and the C. W. & Z. Company to complete the extension, is as follows:

From Broadway to Tunnel, $\frac{3}{4}$ mile road-bed....	\$ 30,000
The Tunnel, 2 do do.....	658,375
From Tunnel to Sharon, 9 $\frac{1}{2}$ do do.....	160,774
From Sharon to Morrow, 19 do do.....	266,000
Iron Bridge across Miami at Morrow.....	35,000
36 miles of main and side-track.....	270,000
36 do ballast.....	36,000
62 do fence.....	24,500
	\$1,500,949

"The most expensive, and by far, largest portion of the right of way, has been obtained, as well as the real estate for depot purposes, and paid for.

"The estimate is known to be in the aggregate, ample, the character of the work having been fully tested, by the work already done, and paid for, amounting, for all purposes, to \$650,000.

"To meet the above expenditure, the Tunnel

\*It will be perceived that I have used a larger per centage for working expenses in this case than in the other. The reasons are that the coal transportation is large, and the price for its carriage low. The proportionate working expenses will be probably increased.

nel Company have an *unexpended* stock subscription, which is now, or can be, made available towards construction, of \$200,000; also, yet in their possession, \$953,000 of first mortgage bonds, (the whole issue being \$1,000,000, of which \$47,000 has been paid out.) These bonds are secured by a first mortgage on the assets of the corporation, among which is real estate estimated to be worth \$200,000, and the several sums expended in depot grounds near the business heart of Cincinnati, in rights of way, and work on Tunnel and its immediate vicinity, about \$575,000, all of which has been paid for.—The interest on these bonds for the first two and a half years, is to be paid out of a special stock subscription already made, amounting to \$250,000, an unusual feature, and one claiming the especial attention of capitalists.

"The C. W. & Z. Company will have \$1,000,000 of first mortgage bonds on the 19 miles of road between Sharon and Morrow, additionally secured by a second mortgage on the Tunnel Road, from Sharon to Cincinnati, and a fourth mortgage on the present 131 mile section of finished line. From these bonds will be realized at least 70 cents on the dollar, and the resources may be stated as follows:

Net proceeds of \$950,000 1st mortgage Tunnel...	\$665,000
do do \$1,000,000 1st mortgage, 19 miles..	700,000
Total.....	\$1,365,000

"Leaving only \$135,000 to be met by the subscription of \$222,000 already made.

"This million issue of the C. W. & Z. Road is to have its interest secured for 2 $\frac{1}{2}$  years, by a special fund, somewhat similar to that of the Tunnel Company.

"To make easy the financial affairs of the Company during the construction of the extension, and to restore its credit, as well as to secure its early and necessary equipment, and enable its business to be conducted to the satisfaction of the officers of the Railroad and to the community, as well as to render a large amount of *precarious capital certainly productive and amply remunerative*, requires that there shall be co-operation of those representing the various securities of this Company, proportionate to the several grades of the same. It is therefore suggested that the interest on the 1st mortgage bonds past due, and falling due May 1st, be funded by the holders taking 3d mortgage bonds, at 70 cents on the dollar. That the interest on the 2d mortgage bonds past due, and falling due on the 1st of May and November of this year, and in May, 1858, be funded with 3d mortgage bonds at same rates. That the interest on the 3d mortgage, and income bonds, which have been regularly sold by the Company, be funded in kind, at 70 cents on the dollar, for six semi-annual times.

"Such action would result in an immediate restoration of the Company's credit—give a



permanent market value to its securities, and with its earnings, enable its managers to perfect the road-bed and machinery, and supply any deficiency, and subsequently meet the interest as it becomes due.

"The stockholders are expected, at the annual election for Directors in March next, to take proper action in this matter; and it is hoped that, in the meantime, the bondholders and other creditors will prepare to co-operate in the developing this unquestionably great and meritorious work.

#### PENNSYLVANIA PUBLIC WORKS.

The following are the important sections of a bill introduced into the Legislature of Pennsylvania to provide for the sale of the main line of Public Works. By the first section the Governor is authorized to sell the same to the Pennsylvania R. R. Co.:

SECTION 2. That the Pennsylvania Railroad Company shall pay for the said main line of the public works the sum of nine millions of dollars, by an issue to the Commonwealth of Pennsylvania of the capital stock of the said railroad company in shares, as to other stockholders, said amount of nine millions of dollars; certificates of which shall be delivered to the Governor, for the use and as the property of the Commonwealth, and for said stock the said Commonwealth shall be placed on a footing of equality with the other stockholders of the said company; and the said railroad company are hereby authorized, for the purpose aforesaid, to increase the capital stock of said company nine millions of dollars.

Sec. 3. That the Governor of this Commonwealth be and he hereby is authorized and required to subscribe to the capital stock of the Sunbury & Erie Railroad Company the sum of five millions of dollars, for the purpose of completing the same, and pay for the stock so subscribed by the transfer and delivery to the said Sunbury & Erie Railroad Company of five millions of dollars of the said stock of the Pennsylvania Railroad Company; and the said Sunbury & Erie Railroad Company shall issue certificates of stock therefor to the said Commonwealth, as to other stockholders, and deliver such certificates to the Governor, for the use and as the property of the said Commonwealth; and the said Sunbury & Erie Railroad Company shall pay to the said Commonwealth semi-annually, on the 30th days of January and June, in each and every year, five per cent. on the amount until the time when one track of the railroad of the said company shall have been completed.

Provided, however, That no part of the amount so subscribed by the Commonwealth to the said railroad company shall be applied to the payment of existing debts of the company, but only to the construction or completion of the unfinished parts and portions of the said road; and if the said Sunbury & Erie Railroad Company shall apply any part of the amount so subscribed to the payment of the existing debts or liabilities of the said company, such application shall work a for-

feiture of the charter of the said company to the Commonwealth.

Sec. 4. That the said Pennsylvania Railroad Company, purchasers of the said main line of the public works, are hereby authorized to extend the present railroad to the river Delaware; to alter the canal transferred by the State to the said company to a slack-water navigation, or enlarge and deepen the said canal, in whole or in part, as may be most advantageous and expedient, and to dispose of any part of the said works as they now are, or as they may be, so altered and enlarged, to any other corporation of this Commonwealth authorized to construct and work any canal or railroad in this Commonwealth.

Sec. 5. That if the Pennsylvania Railroad Company shall accept the terms and conditions of this act, the duty now required to be paid by them and the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company, upon the tonnage passing over their respective roads, shall cease, as also the tax on dividends and interest on the bonds and land or property of said Pennsylvania Railroad Company; and the right of the Commonwealth to resume the Pennsylvania Railroad, as provided for in their charter, shall also cease and determine.

Sec. 6. That as it is the true interest and meaning of this act that the purchasers of the said main line and their assigns should fully assume the same position which the State now holds in relation thereto, the faith of the Commonwealth of Pennsylvania is hereby pledged for the enactment of all such laws, and the performance of all such acts as may be deemed necessary by any legal tribunal of the State for placing said purchasers and their assigns in such position.

The act provides also that the balance of the stock of the Pennsylvania Railroad shall be applied to the Sinking Fund.

[From the Louisville Journal, Feb. 11.]

#### INTERESTING FROM NEW MEXICO.

The following description of the silver mine region of New Mexico, recently taken possession of by Emigrants from the States, was addressed to Dr. Scates, of this city, and will no doubt be very interesting to our readers, who desire to know something of this rich new country situated somewhere in the neighborhood of sunset:

TUBAC, New Mexico, Dec. 1, 1856.

My Dear Sir: After my long journey I find myself comfortably situated in the valley of the Holy Cross (Santa Cruz), in the full and undisturbed possession of the quarters vacated by the Mexican garrison, when they abandoned the old town of Tubac after an occupation of one hundred and forty years. The houses are adobe and not the best in the world, but the best in the territory, and by a little repair I have contrived to make the commandant's room so that I can write and read by a good fireside.

A command of 400 Light Dragoons have since arrived and taken up their quarters within fifteen miles, so that our fears of the Apaches are considerably diminished.

As to mines. We have only made one or two prospecting tours, but these proved so successful that all the time since has been occupied in getting hands to work on the ore, preparations are now being made for smelting and refining. The silver ore yields 10 to 83 per cent. and plenty of it close to wood, water

and grass. This valley is the best in the Territory and contains some very good land, but it all requires irrigation, a process which the Americans neither understand nor like. The productions are, or rather were, wheat, barley, corn, beans, peas, grapes, peaches, pears, figs, granadas, quinces, &c. The grazing is good—equal to many parts of Texas and California. No grain is fed to stock during the year round—the grasses are sufficiently abundant and nutritious, and the range is very extensive.

At the present time we have a fall of snow on the mountains, and rain in the valley—distance apart about 10 miles. I am advised it never snows in the valley, but remains on the mountain tops nearly all winter, giving a beautiful view.

The Santa Cruz river sinks, a few miles below and rises again before reaching Meron, filled with alkalis and impurities, making that vicinity very unhealthy, and particularly subject to chills and fevers. I had a spell of them upon my arrival, which disgusted me entirely with that disease, as well as all vicinities where they are engendered.

We had rather a lonesome time at first, as all the company was sick, but since the arrival of the troops have more company at Tubac than we wish.

A countryman of ours, one Palatine Robinson, and his wife, came over with the command, and have become residents of this ancient and honorable town by commencing housekeeping on the opposite side of the plaza from me.

In two or three years every inch of the arable land in this valley will be occupied, and by that time we hope to have the minea under full headway.

Our hunters have fine fun killing Turkeys, deer, and occasionally a grizzly; and at present a vegetarian would have a poor chance for a living.

I should be glad to hear from you again, as news is very desirable, and a mail route is now opened direct by military express from the Rio Grande, via Independence and Santa Fe.

Yours truly, CHARLES D. POSTON.

RECENT DECISION.—The following is a recent decision in the Superior Court of Ohio.

Little Miami Railroad Company v. Daniel Collets, et al. BRINKERHOFF, J. Held:

1. In a proceeding by a railroad corporation for an appropriation of a right of way under the act of April 30, 1852, the jury, after allowing for the full value of the land actually appropriated for the right of way, in view of all its uses and relations, without deductions for benefits of any kind, and in their estimate and assessment of the incidental damage accruing to other lands of the owner, cannot legally take into consideration and make allowance for general benefits—or such as accrue to the community and vicinage at large—from the construction of the work proposed.

2. Whether special benefits, or such as accrue directly and solely to the owner of the lands appropriated, may be taken into consideration and allowed for, *quere*?

3. In order to the reversal of a judgment, error must appear affirmatively on the face of the record on which error is assigned; it will not be presumed.



**SOLUTION OF QUARTZ FOR GOLD MINING.**

THE Australian papers just received from Melbourne report the discovery, by Count Dembinski, of a process by which quartz or silica is chemically dissolved, and all the gold, metallic oxides, and metals contained in it precipitated. His method is the following:—One part of quartz in small pieces is, together with two-and-a-half or three parts of carbonate of Soda, brought to a red heat and melted. Cast-iron tubes are, perhaps, the best vessels in which this process can be done. Silicate of soda is now formed deliquescent in air, and perfectly soluble in cold water, the carbonic acid of the soda being, of course, given off by the reaction. This silicate of soda is dissolved in water, in wooden vessels, and thus left for a few hours, during which time the gold and all other foreign substances contained in the quartz are precipitated. After the precipitate has been formed the solution of silicate of soda is, by means of a syphon, decanted into another wooden vessel, in which, by the inflation of carbonic acid, the soda is separated from the silicic acid, and regained as carbonate of soda. By decanting it again and evaporating the water it is made fit for another dissolving process. He obtains the carbonic acid, which is used for regenerating the soda, from the same fire which he makes use of in combining the quartz and soda. This he does by employing the well known centrifugal air-pump, and follows up in all particulars the method of Melsens in the decomposing of saccharate of lime. By inflating carbonic acid into the solution of silicate of soda he separates the silicic acid from the soda. This latter remains in water, the silicic acid has been precipitated in the form of a transparent nebulous, Jelly-like substance, which cannot be separated from water by filtration. He now decants the solution of carbonate of soda, which, by means of evaporation, he obtains again as dry carbonate of soda. As such it can be made use of in further operations.

**LUDICROUS.**—A rather ludicrous error occurs in the London *Mechanics' Magazine* of January 24, 1857, page 84, either through the ignorance of the writer or the bedevilment of the printer's devil. With all gravity the article begins: "Sir—Natural history tells us of an animal called the *squash*, which has a method of fighting at once so offensive, repulsive and inglorious, that most persons, out of regard for their reputation and the taint which the creature leaves behind, feel somewhat ashamed of being engaged in a contest with one of them." The *squash* part might perhaps pass with our brethren across the water, where a *skunk* was never heard of, except by an occasional glance at a work on natural history; but, if thoroughly decayed and properly

handled, the vegetable missile might be almost as loathsome as the animal intended to be named.

**EUFALA R. R.**—A subscription of \$300,000 has been raised to complete the Georgia Southwestern R. R. to Eufala.

**CHERAW & COAL FIELDS R. R.**—We learn by the Wilmington papers that, on account of a clerical error in engrossing this bill, its object is probably defeated for the present. The capital was fixed at \$2,000,000, but the company was to organize when \$200,000 was paid in. The former sum was substituted by mistake for the latter throughout the bill. From the strong manifestation of opinion, however, in the Legislature, in favor of the bill, we can hardly doubt that it will be amended at the next session.

**NEW YORK & ERIE R. R.**—An application has been made to the Legislature of the State of New York for the passage of a bill authorizing this company to add to its capital stock a sum equal to the net earnings which have been applied to the payment of its funded debt, and to divide the stock thus created among the stockholders, in proportion to the amount held by each.

**MONETARY AND COMMERCIAL.**

Since our last report we have to notice an increased demand for money. Business is more active, and the wants of the commercial world are greater. The banks have but a limited amount to loan, and this is entirely inadequate to the wants of the city. Cincinnati must either add to her banking capital or curtail her business. We notice among our private bankers the name of a new house just opening business. We refer to J. F. Larkin. We do not know how much capital Mr. Larkin puts into the business, but we do know that whatever it is, it is so much added in a private way to what should be done by public institutions.

Eastern Exchange has been firm at  $\frac{1}{4}$  to  $\frac{1}{2}$  premium. New Orleans scarce and firm at  $\frac{1}{4}$  to  $\frac{1}{2}$  per cent. Eastern advances as late as Tuesday morning notice a slightly improved market. Discounts are growing easier. First class paper is taken at 9 to 10 per cent.

Foreign Exchange is quoted at  $105\frac{1}{4}$  to  $108\frac{1}{4}$ .

Stocks had opened with considerable activity, and large operations were in vogue.

Winslow, Lanier & Co. advertise a loan of the Indiana Central Railroad of \$250,000, in 10 per cent. mortgage bonds.

It is stated that the negotiations for the province of Sonora have assumed a definite shape, and that our government has purchased it for \$15,000,000, or a trifle more than the value of one of the silver mines with which the province abounds.

We give our usual quotations from Hewson & Holmes' Circular:

Notwithstanding the great stringency in the money market, a very respectable business has been done in the Stocks during the past week, at prices not materially changed from our last weeks quotations.

For Little Miami, we have had sales of 200 shares at 90, which price the stock has maintained without variation for nearly a month. In the Indianapolis and Cincinnati, and Hamilton and Dayton shares, there has been a mod-

erate demand at last weeks quotations. We note a peremptory sale of 2300 shares of Cincinnati and Chicago, at  $2\frac{1}{2}$  to  $2\frac{3}{4}$ . In the non-dividend paying shares, there has been about the usual amount of business done without change in prices.

In Bonds, we report sales of Little Miami and Hamilton and Dayton, at our last quotations. Covington and Lexington second mortgages are  $\frac{1}{2}$  per cent. easier, with sales of \$5000 at  $67\frac{1}{2}$  and interest.

The money market has become inconveniently stringent, and with short supply of currency, it is very difficult placing even the best paper. This state of money matters, it is thought, will be of very short duration, and is mainly caused by the County Treasurers of the State making their annual returns, in conformity to the law, to the State Treasury. In a few days this large fund will again find its way into the usual channels of trade, when we shall have a more comfortable condition of matters.

Exchange on New York is firm at  $\frac{1}{2}$  to  $\frac{3}{4}$ , and on New Orleans at  $\frac{3}{4}$  to  $1\frac{1}{4}$ .

**NEW YORK STOCK SALES, Feb. 23, 1856.**

\$2,000 Kentucky 6's.....	103
3,000 Missouri State 6's.....	84 $\frac{1}{2}$
16,000 Virginia 6's.....	92 $\frac{1}{2}$
900 New York City 5's '70.....	92 $\frac{1}{2}$
1,500 N. Y. Central 6's.....	87 $\frac{1}{2}$
1,000 N. Y. Central 7's.....	101 $\frac{1}{2}$
1,000 Erie Railroad 7d mort. Bonds, 1883.....	97 $\frac{1}{2}$
1,000 Erie R. C. Bonds, '71.....	82
2,000 Harlem R. R. 2d mort. Bonds.....	73
5,000 Ill. Cent. R. R. Bonds.....	97 $\frac{1}{2}$
100 Shares N. Y. Central R. R.....	90
37 " Chicago & Rock Island R. R.....	100
90 " Milwaukee & La Crosse.....	71
340 " Reading.....	60 $\frac{1}{2}$
10 " Mich. Cent.....	94 $\frac{1}{2}$
100 " Erie R. R. stock.....	56 $\frac{1}{2}$
5 " Mich. So. & No. Ind.....	75 $\frac{1}{2}$
200 " Illinois Central R. R.....	135
92 " Cleveland & Pittsburg.....	53 $\frac{1}{2}$
64 " Cleve. C. & Cin.....	101 $\frac{1}{2}$
100 " Cleveland & Toledo.....	74
44 " Galena & Chicago.....	104
50 " Mil. & Miss.....	68

**CINCINNATI STOCK SALES,**

AT THE STOCK BOARD,

**MERCHANTS' EXCHANGE****AND AT PRIVATE SALE.**

BY HEWSON & HOLMES.

For the week ending Feb. 25, 1857.

**BONDS.**

\$5,060 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds.....	67 $\frac{1}{2}$ and int.
1,000 Cincinnati, Ham. & Dayton R. R. Co. 7 per cent. 2d Mort. Bonds.....	83 " "
5,000 Hillsboro' & Cincinnati R. R. Co. 7 per cent. 1st mort. Bonds.....	47 " "
2,000 Indiana Central R. R. Co. 10 per cent. Income Bonds, due in '58.....	93
1,000 Gov. & Lex. R. R. Co. 6 per cent. Income Bonds.....	50
6,000 Marietta and Cincinnati R. R. Co. 7 per cent. Domestic Bonds.....	38
1,300 Columbus and Xenia R. R. Co. 7 per cent. Div. Bonds, due in 1860.....	90
5,000 Bourbon county, Ky., 6 per cent. Bonds, due in 1881.....	80
1,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds.....	80 $\frac{1}{2}$
750 Little Miami R. R. Co. Dividend Scrip.....	80
950 Ohio & Mississippi R. R. Co. Scrip.....	27
1,000 Dayton, Xenia & Belpre R. R. Co. 7 per cent. 2d mort. Bond.....	40 " "

**STOCKS.**

142 Shares Southern Pacific.....	90
700 " Cincinnati & Chicago.....	21 $\frac{1}{2}$ and int.
400 " do do.....	21 $\frac{1}{2}$ " "
400 " do do.....	21 $\frac{1}{2}$ " "
400 " do do.....	21 $\frac{1}{2}$ " "
460 " do do.....	21 $\frac{1}{2}$ " "
100 " Ohio and Mississippi.....	81 $\frac{1}{2}$ " "
316 " Peru and Indianapolis.....	81 $\frac{1}{2}$ " "
50 " Indianapolis and Cin.....	63
31 " Cin., Ham. & Dayton.....	70







## ENGLISH RAILWAY TRAFFIC.

	1856.	1855.	Increase.
Total receipts for goods, passengers, mails, &c.	£22,995,500	21,123,315	1,872,185
Length of railways open for traffic.....	Miles, 8,760	8,240	620
Average receipt per mile open during the year.....	£2,759	2,668	91

There is thus seen to be an increase, not only in the amount received, but also in the length of railway, and this has been to such an extent that the receipts per mile are likewise greater; and although the later weekly returns for 1856 did not show so large an increase over those of 1855 as those of the earlier portion of the year exhibited, there is still reason to hope that railway property has now overcome many of the difficulties by which it was beset, and that it will henceforth yield a return more commensurate with the advantages it has conferred upon the public than has hitherto been the case.

Among the benefits derived from railways London may reckon the increased importation and diminished price of fuel, which have been the consequence of the better development, as shown by the following return of

## RAILWAY COAL TRAFFIC.

	1856.	1855.	Increase.
Coals brought to London by rail.....	1,246,299	1,137,833	108,464

But the value of railways in this respect will be better appreciated if the quantities brought in that way are contrasted with those brought by other means of conveyance, for during the same period we find that the

## CANAL COAL TRAFFIC

	1856.	1855.	Increase.
Only amounted to.....	25,401	24,651	750

And that the whole amount of

## SEA-BORNE COALS

	1856.	1855.	Increase.
Brought into London in those years did not exceed	3,100,322	3,016,868	834,454

From which it appears that the railway coal traffic now bears a very large proportion to the importation by sea, and that during last year the increase by rail was greater than the other, although there was not then the competition for purposes of war in freights which had previously existed; while the canal traffic is so small as scarcely to deserve notice.

## RAILROAD PROJECT IN TURKEY.

The late arrivals bring us the details of an important railroad movement in Turkey, Mr. Layard has obtained a concession from the Porte for the construction of a railroad from the Danube, either at Rustchuk or Silistria by the way of Shumla, and Adrianople to Enos or some other point on the Archipelago where a good harbor can be obtained. The Constantinople correspondent of the *London Times* says of the project:

"It would effect a revolution in the whole export trade, by placing the great harbour of European Turkey in the Archipelago, dispensing thus with the delays of months to which vessels are exposed in passing the Dardanelles and Bosphorus, and doing away with the dangers of the Danube and Black Sea navigation. Most of the produce of the Danubian Principalities, of Bulgaria and Roumelia, and even of Hungary and Transylvania, which is now sent to Brailow, Galatz, and down the Danube, or to Varna and Bourgas, on the Black Sea, would be certain to take this

route. But besides the trade already existing, this line would be sure to lead to great increase of exports from Roumelia, the fertile plains of which have now no outlet except Constantinople, and this is so expensive that the grain costs six piasters or less the kilogramme all over that country, while it is sold at 25 or more at the capital. The line could reckon, besides, on the greater part of the transit trade from Europe to Syria, Egypt, and India: for if the line to Cronstadt, in Transylvania, should be finished, and this line connected by Bucharest with the Danube, the communication between London and Egypt would not take more than seven or eight days. So this line, intersecting and connecting the most productive parts of European Turkey, would be more sure to pay than any other contemplated. At Enos, or any other convenient spot in the Archipelago, it is intended to make a great entrepot of commerce. The whole line would be from 320 to 350 miles in length, and all the land would be granted free of cost."

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 54 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by  
VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

## RAILROAD CAR

AND  
COACH TRIMMINGS.

DOREMUS & NIXON,  
No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush.

Printed & Unprinted do., Entirely New Designs;  
MOQUETTES & VELVET CARPETS;

Enamelled Cloth, for seats & backs of Cars;

ROPE MATTING, Every Width;

Oil Cloths for Head Linings, Enamelled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT,

FOR CUSHION & MATTRESS FILLING.

N. B. We have the Plush in bond for exportation  
sepl8 DOREMUS & NIXON.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,  
THEODORE DEHON,  
no13 10 Wall st., near Broadway, New York.

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
President of the Board.

aug14-ly

## To Railroad Contractors.

McMinnville, Tenn., Jan. 12, 1857.

SEALED PROPOSALS will be received at McMinnville until March 16th, 1857, for the grading, masonry and bridging on sixty miles of the South Western Railroad, commencing at McMinnville, the southern terminus, and running north through Warren, White and Putnam counties, to Livingston, in Overton.

The character of the work is heavy, comprising a large amount of rock excavation, several heavy jobs of bridge masonry, and 1200 lineal feet of Howe's or MacCallum's bridging.

Proposals for the above work may be made by sections of one mile each; or for thirty, or the whole sixty miles, including iron, track-laying, depot buildings, and all the equipment necessary for operating the road when complete.

Plans, maps, profiles and specifications may be seen, and all other information obtained, at the Engineer's Office, after March 1st, at McMinnville; or before that time, by addressing me, at the Engineer's Office of the M. & O. R. R., Jackson, Tenn.

ROBERT STERLING,  
Engineer in Charge.

feb12

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

## RAILWAY AGENTS

AND

## COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

## Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.  
feb5-ly

## RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-ly 10 Wall st., near Broadway, New York.

## SAFETY &amp; ECONOMY.

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point for which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

## T. F. RANDOLPH &amp; BRO.

Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,

CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR

RAILROADS, STEAMBOATS,

AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGWAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

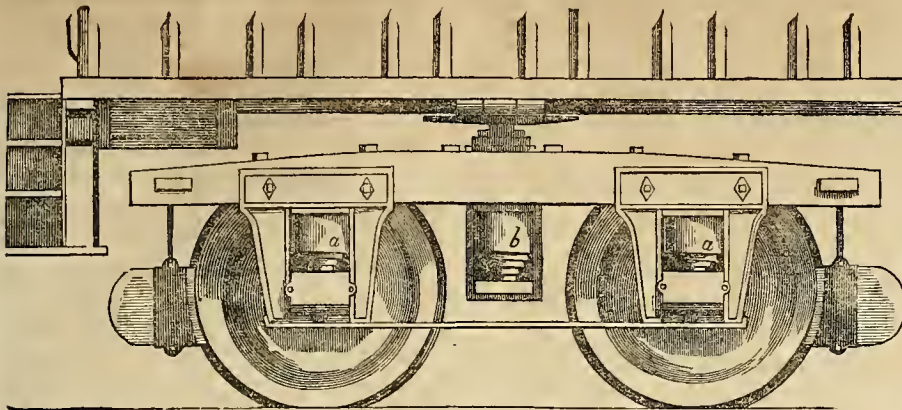
## WOOD ENGRAVING.

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-ly 119 Walnut st., Old Fellows' Building



## GARDINER'S CONICAL VOLUTE CAR SPRING!



## The N. York Metallic Car Spring Co.

ARE NOW PREPARED TO NEGOTIATE WITH  
RAILROAD COMPANIES, CAR-BUILDERS, AND OTHERS,  
FOR SUPPLYING THE ABOVE SPRING.

The railroad community have long felt the necessity of a good and reliable Car Spring, one with less objectionable features than either the Rubber or Elliptic Springs—for, with these exceptions, there are none that are in any way equal to the immense work they have to perform.

In view of obviating this evil, the above Company have been for nearly a year past engaged in testing Gardiner's Conical Volute Car Spring, erecting buildings and constructing machinery, preparatory to manufacturing them on an extensive scale; and they are now prepared to say that they can offer to the railroad interest a Car Spring that is in every respect superior to any in use. It is not liable to breakage—is of very simple construction. The motion is much greater, more steady and elastic than the Rubber Spring. It occupies the same, or less space, is not as expensive, and is so graded as to accommodate itself to any load. There is no friction, which object is now for the first time accomplished. All Springs warranted.

MANUFACTORY AND SALESROOMS:

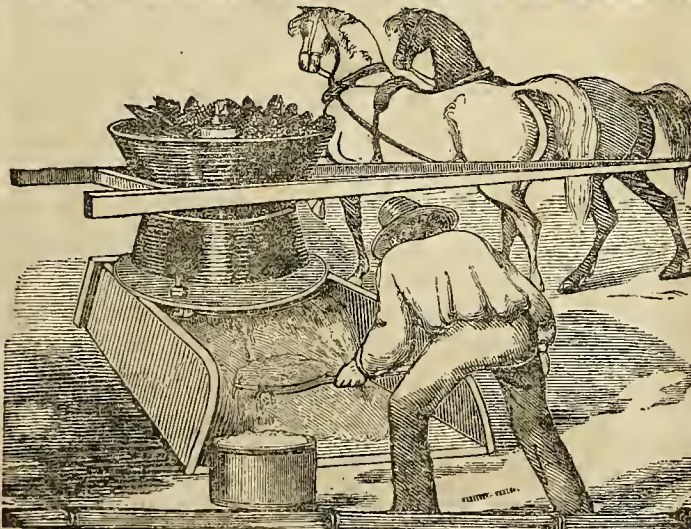
Nos. 315, 318, and 3'0 West 26th Street.—Office, 15 Nassau Street, New York.

CHAS. MINOT, President.

CHARLES ELY, Treasurer.

Address communications to RICHARD VOSE, Secretary.

## THE "LITTLE GIANT" CORN &amp; COB MILL.



Patented May 6th, 1854.

Improve in 1856.

With triple set of Crushers and Double Grinding Surfaces, or, in other words,

## TWO MILLS IN ONE.

Grinds twice as much, in the same time, as Single Mills of the same size, and makes a more even quality of Meal, especially Cob Meal.

For strength, durability, and convenience of use, we warrant them superior to all others. The No. 4 shall do its work as well up to the forty thousandth bushel as any Mill now known will do the five hundredth bushel. Breakage or derangement is hardly possible, as the whole arrangement is made with a view to the greatest strength, as well as speed, and quality of work. Any responsible party, wishing to try one of the IMPROVED "LITTLE GIANT" MILLS, will, on application, be furnished with one. If it is not found superior to others, and decidedly advantageous to the party to keep it, he may return it within thirty days.

The Mills are furnished complete, with Meal Box (or Platform) and Lever, ready for use without further expense, at the following prices, at our works:

No. 4—\$60.00—Grinds 20 to 25 bushels per hour, with three horses.

No. 3—50.00—Grinds 15 to 20 bushels per hour, with two horses.

No. 2—40.00—Grinds 10 to 15 bushels per hour, with one horse.

No. 1—30.00—Grinds 5 to 10 bushels per hour. This has but two shells.

The difference in amount of work for each Mill will depend upon the condition of the Corn, speed of the team, and the gauge at which the Mill is set.

SCOTT & HEDGES, Cincinnati, Ohio.

## PRATT &amp; FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps.

## Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

## Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

## LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,

Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

## LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

## Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

## Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

## STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

## WASTE,

Baggage Barrows and Checks, Freight Trucks,

## CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED. oc23-1y



## New England Car Spring Company

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car  
Springs, and of the best quality of Vulcanized Rubber  
Hose, Engine, Hydrant, and Conducing. Sold at  
wholesale at great discount from list prices.

oc23-2m

CHARLES L. NOBLE, Agent.

THOMAS D. STETSON,  
Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,

No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written  
Opinions of Inventions. Important aid in bringing out  
Inventions. oc23

## PAGE'S

## PATENT PORTABLE CIRCULAR S.W. MILLS.

THE subscribers are manufacturing, under patent, the  
above Mill, in connection with their improved  
Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assort-  
ment of Cast Steel Saws of their own manufacture, Saw  
Mandrels, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio

feb7

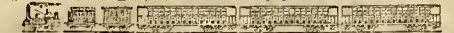
LEE & LEAVITT.



## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

### OHIO AND MISSISSIPPI RAILROAD.



ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3.30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2.20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5.45 P. M.

Freight—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5.30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,  
Acting Superintendent.  
Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5.45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,  
Ag't Cin. and St. Louis Omnibus L.  
Office No. 2 Burnet House.  
Jan 2.

## RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Over N. P. James' Book Store.

## PERU & INDIANAPOLIS R. R.

Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 10 o'clock P. M., after the arrival of the Trains from the West, South, and East, arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M., for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash, and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R., make close connections at Peru for Indianapolis.

JAMES H. MILLS, Supt.  
L. N. ANDREWS, Gen. Freight Ag't.  
Indianapolis, Sept. 16, 1856. [mh20-1y.]

## Racine and Mississippi Railroad.

### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12.30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6.30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton.

A Steamer leaves Racine for Chicago every evening at 10.20.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Asst Sup't. aug 14

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



## Manufacturers of all kinds of Railroad MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

### BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

### BILLS OF EXCHANGE, CHECKS.

Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and

### Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of

GEORGE T. JONES.

South-East corner of Main and Fourth Sts., Cin.

CHARTERED A.D. 1819. CASH CAPITAL \$500,000.

ETNA INSURANCE CO. & HARTFORD, CONN.



BRANCH, CINCINNATI, O. NO. 171 VINE ST.

## J. B. BENNETT, GENERAL AGENT.

Losses Equitably Adjusted and Promptly Paid. Insures at as reasonable Rules and Rates as First Class Security can be transacted.

Agents appointed and all business of the Company in the West, North, and South-West, under direction of this Branch, attended to with dispatch.

F. C. BENNETT, and } Adjusters.  
W. F. CHURCH,

J. B. BENNETT, General Agent.



## Most Direct Route to the East.



## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK.

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:10 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:10 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

Sup't Terre Haute &amp; Richmond R. R.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis &amp; Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M., and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:30 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855.

[Jan. 17]

Agent.

1855.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## EXCLUSIVELY AN EASTERN ROUTE.

## THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

Jy 17

H. B. RUGGLES, Conductor.

## Myers' Patent Cylindrical Car.

NOTICE.—The Subscriber having become proprietor of MYERS' PATENT CYLINDRICAL CAR, for a considerable portion of Western territory, including the State of Ohio, offers the same to Rail Road Companies on favorable terms. The public will be furnished with in a short time with complete explanations of its operation, together with the results of actual experiments testing its applicability to all the uses for which it is recommended.

W. CLOUGH,

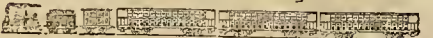
South-western Car Work

Madison, Indiana. May 11.

1856. Winter Arrangement. 1856

## Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST.

## FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

## NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Springfield for Columbus; at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, Pittsburgh, Philada.; at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities.

Same train connects at Dayton for Dayton & Michigan Road to Troy, Piqua, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 5:40 A. M., and Chicago 2:00 P. M. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M. and 5:30 P. M.

For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

HENRY O. AMES, Sup't.

The Omnibuses will call for passengers by leaving their names; at either of the Ticket Offices. dec 21

## LANE &amp; BODLEY,

MANUFACTURERS OF

## Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Fellows Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tinture Presses.

my 8

No. 98 Pearl street, Cincinnati

## APPLEGATE &amp; CO.,

Booksellers, Publishers, Stationers &amp; Blank

Book Manufacturers,

43 Main St. Cincinnati, O.

## NOTICE TO CONTRACTORS.

WE HAVE THIRTY MILES OF EARTHWORK between Dresden and Huntington, to be sublet, for which proposals are invited. Plans and specifications can be seen at the office at Dresden at any time.

There is a good State road adjacent to the railroad line, for the whole distance. Supplies are abundant and cheap. The health of the country is good. Address

BECKER &amp; RUST,

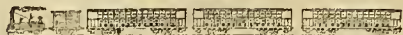
my 8-11

Dresden, Weekly Co., Tenn



## KENTUCKY LOCOMOTIVE WORKS

CORNER OF KENTUCKY AND TENTH STS.  
LOUISVILLE, KY.



THE Proprietors of the Kentucky Locomotive Works would respectfully inform Railroad Companies and the public generally that, having completed their establishment, they are now prepared to receive and execute orders with fidelity and dispatch.

They will contract for

**Locomotives, Passenger, Baggage, Freight, Gravel and Hand Cars,**

Of every style and pattern, as well as all kinds of Stock and Machinery required for railroads.

Particular attention will be paid to repairing, for which they have every facility.

They are also prepared to contract on favorable terms for building all kinds of Machine Tools, such as Turning Engines, Lathes, Planers, Drills, Slotting, Splicing, and Shaping Machines, of every variety of pattern.

Having also a large FOUNDRY connected with the establishment, orders for Castings are solicited, and will be filled with promptness.

Car Wheels of any pattern can be furnished on short notice. Double and single plate and Spoke Wheels of all sizes constantly on hand.

Communications or orders must be addressed to  
OLMSTED, TENNYS & PECK,  
je. 9-1f Louisville, Ky.

## Norris' Locomotive Works



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

je. 27. RICHARD NORRIS & SON

## Mercurial Steam Gauges.

THIS GAUGE has been improved and prepared especially for Locomotive Engines, and is believed to be the most reliable Gauge in use.

Experience proves that the expense of a good Steam Gauge is soon saved in fuel. Besides, it is a safeguard against accidents resulting from an excessive pressure of Steam.

After a fair trial of it, in comparison with the Steam Gauges in use, the Ohio Association of Railroad Superintendents adopted the following:

"The Committee, to whom was referred the subject of Steam Gauges, submit the following Report:

"They have made use of different kinds of Steam Gauges, and have become convinced that the Mercurial Gauge, for use on Locomotive Engines, is in all respects the most reliable indicator of the pressure of steam in the boiler—while it is less liable than the Spring Gauges to get out of order; and they, therefore, recommend it to all Railroad Companies."

COMMITTEE—Messrs. DURAND, FULTON and TILTON.  
Manufactured by J. M. BROWN,  
At Kirkup's Machine Shop, opposite Little Miami De  
pot, Cincinnati, O. je7



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

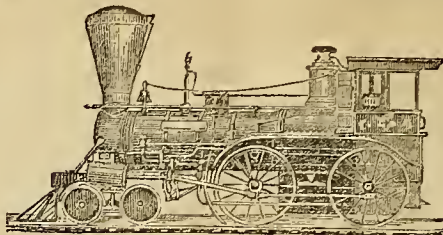
## DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Ties, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



**NILES & CO.,**

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.

Feb. 13 1855 6m.

## RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

## A. B. LATTA'S

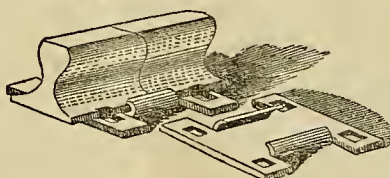
Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

ap17 A. B. & E. LATTA.  
J. B. GREEN, C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

## Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

Feb. 14 ly.

## THE SCHENCK MACHINERY DEPOT AND

**Leather Banding Manufactory,**  
No. 163 GREENWICH STREET,  
NEW-YORK,

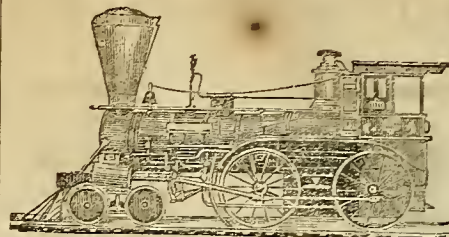
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

## Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR  
Aug. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers, Engine and Car Screw Bolts, all sizes; Coach Leg and Telegraph Screws.

**LOCOMOTIVE ENGINE LANTERNS.**  
From the best Manufacturers, and at their prices—Car, Hand, and Signal Lanterns.

**Cotton Duck for Car Covering,**  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight, Car, and Switch Locks, Door Knobs and Bents. Brass and Iron Wood Screws. Brass and Silver Plated Trimings for Windows and Seats. Varnish, Coach Japan, and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bolts, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other Articles pertaining to Cars.

ALBERT BRIDGES,  
Cambridgeport, Mass.

Late Davenport & Bridges, Car Manufacturers.  
ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass.

foe6

## GEO. D. WINCHELL & BRO.,

172 Elm Street, between 4th & 5th,  
CINCINNATI, O.,

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

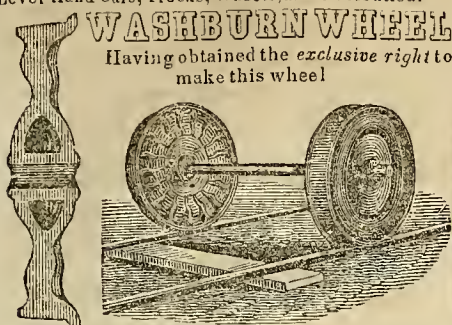
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855 1



### FULTON CAR WORKS, CINCINNATI, OHIO.

The Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



#### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight-wheeled Gravel Cars. We manufacture a superior

#### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

#### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

#### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

Jan 1. **DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT, ... M. D. WELLMAN, ... C. M. RUSSELL

#### DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,  
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th **JOSEPH DAVENPORT.**

#### S. C. THOMSON & CO.

MANUFACTURERS OF

#### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1st 2d NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

**ALBERT M. LEA,**  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufactures of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

#### RAILROAD MAP OF UNITED STATES

NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

#### IRON BOILER FLUES. PASCAL IRON WORKS.

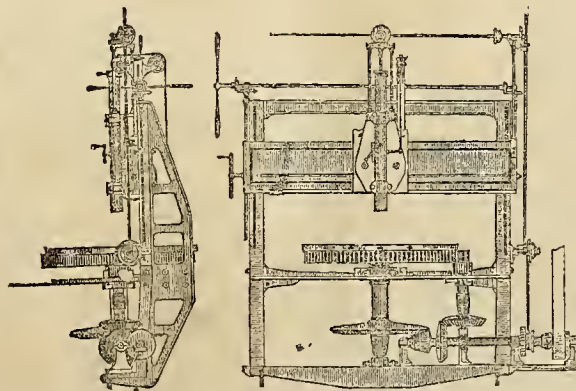
**MORRIS, TASKER & CO.,**  
Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length, as required.

**WROUGHT IRON WELDED TUBES.**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St., PHILADELPHIA, [reg

## NILES' WORKS.

### FOUNDERS AND MACHINISTS,

EAST FRONT STREET, CINCINNATI,



Manufacturers of  
**TYRE LATHES,**

Of the most approved plan.

**HORIZONTAL**

**FACE PLATE LATHES.**

OF VARIOUS SIZES, TO SWING

From 40 inches, to 12 feet.

**PLANING MACHINES**

LARGE & SMALL.

## MARINE & STATIONARY ENGINES.

BOILERS OF EVERY DESCRIPTION.

## HEAVY FORGINGS,

IRON AND BRASS CASTINGS, &c., &c.



## Parry's Anti-Friction Box,

PATENTED IN 1853.

THE attention of the public is directed to this invention, for which patents have been granted by the United States, England, France and Belgium—it is designed to relieve all species of pivot or end friction, and is especially adapted to receiving the thrust of propeller shafts, pivots for railway turn tables, steps for turbine wheels, mill stones, center plates for eight wheel cars, steps for heavy mill shafting, and for all kinds of presses where the power is received by the application of a screw, the gain of power by the adoption of this box is immense.

Contracts will be taken for erecting Railway Turn-Tables, (which will cost no more than a wooden structure), and their durability will be guaranteed for twenty years without repairs.

Applications will be received for the sale of State Rights for the use of this invention.

For further information, apply to

JOHN RICK & CO., Patentees.

90 South Fourth street, Philadelphia.

READ THE FOLLOWING CERTIFICATES.

OFFICE OF THE PENNSYLVANIA CENTRAL R. R.,  
PHILADELPHIA, June 9th, 1855.

MR. PARRY—

DEAR SIR:—We have your Anti-Friction Pivot in use under Turning Tables, on this Road. They require no gearing or machinery, but simply the strength of one person to turn them when loaded with engine and tender. I should judge they will last for years without repair—an important item in such structures.

Yours respectfully, J. EDGAR THOMPSON,

Civil Engineer and President.

I fully concur in the above and foregoing statement, having examined the Turn-Table and witnessed its operation

WILLIAM B. FOSTER, Jr.,

Civil Engineer

SUPERINTENDENT'S OFFICE,  
TRANSPORTATION DEPARTMENT, PENN. R. R.,  
ALTOONA, Blah Co., Pa., Nov. 11, 1854.

MR. PARRY—

DEAR SIR:—The Turn-Table in the new engine house at Altoona is constructed of boiler plate, and is fifty feet in diameter. The center bearing is an application of your Improved Anti-Friction Box, and thus far has given evidence that it is all that its proprietor claims for it—the very best center bearing that can be found of that purpose.

Very respectfully,

H. J. LOMBAER, Superintendent.

ENGINEER DEPARTMENT, NORTH P. A. R. R.,

PHILADELPHIA, Feb. 10, 1855.

I am so well satisfied of the excellency of Parry's Anti-Friction box, that I have purchased for the North Pennsylvania Railroad Company the right to use it, and Messrs. Bancroft & Sellers are now building two locomotive engine turn-tables of cast iron for me, one of twenty-five feet, and one of forty seven and a half feet diameter, to which these boxes are to be applied. I have no doubt whatever that the invention is a very valuable one, and it is simple and not liable to get out of order.

EDWARD MILLER, Chief Engineer.

Reading, June 2, 1855.

There are two sets of the above rollers in use on the Philadelphia and Reading Railroad; one under a heavy twenty-five foot iron turning platform, for large locomotive engines, and the other under a six ton crane.

Both have been in operation for some time, and have proved satisfactory; moving with less friction than any other plan of bearing which I have seen, and requiring no repairs and very little grease or oil.

I consider them a most useful invention; as greatly decreasing friction on all heavy bearings for either vertical or horizontal shafting machinery.

Signed,

G. A. NICHOLS,

Engineer and Superintendent Philadelphia and Reading Railroad.

BORNTOWN, N. J., Nov. 22, 1854.

In July, 1853, I attached Parry's Anti-Friction Box to the shafts of steam propeller Amboy; it receives the oak and forward thrust of the wheels, each eleven feet in diameter. I am convinced, by thorough practice, that it is the best thrust bearing that can be used; it does not heat or corrode, requires very little oil, and I think a decided gain in power or usefulness, over any rubbing surface that may be sufficient to resist the pressure of the forward thrust of a propeller shaft.

ROBERT ALLEN,

Superintendent of Steamboats for Camden and Amboy Railroad Company.

PHILADELPHIA, February 19, 1855.

GEO. T. PARRY, Esq.—Dear Sir:—I have examined your Anti-Friction Box for its application more particularly to the purpose of turn table pivots, as well as steps for upright shafts, and difficult as it is to demonstrate as to the perfection of its working, I find its practical applications to be nearer to what has been long desired and sought than anything heretofore offered for such purposes. Great difficulty has ever existed with turntables in obtaining a pivot that would give freedom of motion without constant attention and adjustment, and even with the most approved, expensive gearing has been rendered necessary.

The table twenty-four feet in diameter, made by Bancroft & Sellers, of this city, being balanced on its center, I found it required my entire weight on the extremity of one of its arms to destroy its equipoise, while with the power of my little finger I could turn it horizontally upon your box. I therefore take pleasure in recommending its use, as the most perfect pivot and step that has ever been presented to the public.

Very respectfully,

STRICKLAND KNEASS, Civil Engineer.

## CONSULTING ENGINEER.

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

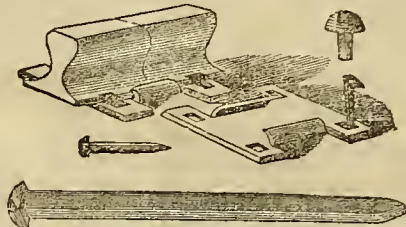
Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

## GREAT WESTERN

## Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

Feb 28

CORBY, GOSSIN & CO.

## LIGHTNER'S PATENT RAILROAD JOURNAL BOX.

THIS BOX possesses important advantages over all others in use. It is conceded by the first railroad men in the country to be the desideratum for railroad journals. Upwards of

## One Hundred and Twenty R. R. Cos

Have purchased the right to use this improved box upon their roads.

The first cost and "fitting up" of these boxes is 20 to 25 per cent. below that of most boxes in use. They will save about 75 per cent. in consumption of oil. The construction is simple; they are not liable to become loose, nor "heated" by severe service. The reservoir is held close to the shaft, and the oil journals are secure from dust, yet easy of access. The brasses may be removed from the journals, while under the car, in a few minutes. Cars furnished with these boxes run from one to three months without replenishing oil, and are not detained from the road for repairs one-tenth part of the time which is necessary when other boxes are used. The housings may be removed from the pedestals by a simple arrangement, which is original with Mr. Lightner, with but trifling additional trouble or expense.

Drawings of the box, with latest improvements, and patterns for casting them, will be furnished to railroad companies by the subscriber, to whom all communications may be addressed.

WM. SHERBURNE, Agent,

aug28

Office No. 64 Cortlandt street, New York.

## W A S O N ' S

## CAR MANUFACTORY,

Near the Pittsburgh R. R. Shops,

CLEVELAND, OHIO.

Passenger, Baggage, Freight, Dumpers, Hand Cars, &c.,

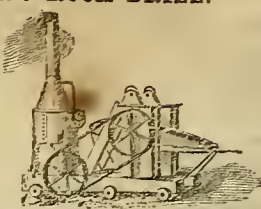
Of the best quality in all respects, style, workmanship and material, made to order with promptness.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

CHARLES WASON,  
Late of the firm of T & R. Wason, Springfield, Massachusetts.

## "GARDNER'S ROCK DRILL."

DESIGNED for Mining, Tunneling, Quarrying use, and Rock Excavations of all descriptions, by the use of which a saving of 50 to 75 per cent. is made. This drill can be operated by hand, horse, or steam power and works equally as well horizontally or at any angle, as perpendicularly.



A silver medal, the highest prize, was awarded these Machines at the World's Fair.

Applications for Territorial Rights and Machines must be made to the Patentee.

G. ARTHUR GARDNER,  
Trinity Building, N. York.

nov17

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS, Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention.

LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## RICHARDSON'S PATENT



OIL CUPS



For Locomotive and Stationary Engines. For sale by  
BRIDGES & BROTHER, Agents,  
Jan 1. 64 Cortlandt St., New York.

## General Map Establishment, No. 3 College Hall, Walnut St., Cincinnati

E. MENDENHALL,  
MAP, BOOK & PRINT SELLER,  
Has constantly on hand  
GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND  
OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,  
Geological and Astronomical Charts, Globes,  
MICROSCOPES, TELESCOPES  
DRAWING INSTRUMENTS, &c.

Publisher of the  
Railway Map of the Western States,  
In Sheet or in Pocket Case;  
The LARGE SECTIONAL and RAILWAY MAP OF OHIO  
the LARGE MAPS OF CINCINNATI, and HAMILTON CO.  
Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA  
MAPS OF EVERY DE ORPTION.  
mh22



# Railroad Record.

E. D. MANSFIELD, - - - Editor.  
W. WRIGHTSON, Associate Editor.

CINCINNATI:  
THURSDAY MORNING,.....MARCH 5, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.  
Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 2.

#### EDITORIAL.

Democratic Almanac .....	17
Bridges over the Western Rivers .....	17
Roads to the Pacific .....	18
Brevities .....	19

#### RAILROAD DAGUERREOTYPES.

New Jersey R. R. & Transportation Co. ....	18
Lowell & Lawrence R. R. ....	18
Mad River & Lake Erie R. R. ....	18
New York, Providence & Boston R. R. ....	19

#### RAILROADS.

Sandusky, Mansfield & Newark R. R. ....	20
Opelousas R. R. ....	21
Chicago, Iowa & Nebraska R. R. ....	26

#### MISCELLANEOUS.

Wabash & Erie Canal .....	22
The Bullion Yield of the World and its Effect on Trade .....	23
Geological Report in Relation to the Soils of Kentucky .....	23

#### MONEY AND STOCKS.

Cincinnati Stock Sales .....	26
Monetary and Commercial .....	26
Sales at the New York Stock Board .....	27

**DEMOCRATIC ALMANAC AND POLITICAL REGISTER FOR 1857.**—We have received from the publisher, C. W. COTTOM, of Indianapolis, a copy of this valuable statistical work. It contains the official vote for President in 1856, by States and counties; the general statistics of the U. S. Government, and a large amount of other interesting and valuable matter. A copy of the book should be in the hands of every man. Price, single copies, 15 cents; \$1.50 per dozen; \$10 per 100. Address orders to C. W. Cottom, Indianapolis, Indiana.

—**KANSAS CITY AND GALVESTON R. R.**—The bill chartering the Kansas City, Galveston and Lake Superior Railroad Company has passed both branches of the Missouri Legislature, and is now a law. This is one of the most liberal charters ever granted to any company. The board of corporators embraces an able company of active and energetic men, both in Missouri and Texas, and combine the interests of the Galveston and Red River railroad, now partly completed, the Fort Smith and Red River Road, with those of the Company just incorporated.

### BRIDGES OVER THE WESTERN RIVERS.

The idea of bridging the Ohio or the Mississippi was at first received with great disfavor, because it was connected with the idea of obstructing navigation. But, if bridges over the Ohio or Mississippi are not to exist, it is obvious the public must submit to a monstrous inconvenience. If there were no means of conveyance but common wagons, the want of bridges would be a very serious obstruction to the local movement of the country; but, when we come to railroads, the want of bridges is equivalent to an entire dislocation of the line. The question then arises, whether the public should submit to this inconvenience without at least trying the effect of bridges? That which might have been anticipated has come. The commercial necessity has compelled a trial of bridges. Not only is there a bridge at Wheeling, but there is one at Rock Island, on the Mississippi, and one building at Cincinnati. The bridge at Wheeling has been the subject of much controversy. The city of Pittsburg, acting through the Legislature of Pennsylvania, commenced suit against the bridge company. The end of it was that the Supreme Court ordered the bridge to be raised, so that the tallest chimneys of steamers might pass under the bridge at high water. Congress met the case by declaring the bridge a national highway, and thus giving the company a right to retain their bridge—and there the matter rests. The Supreme Court acted on what is called the right of the States to the free navigation of the river, as a national highway; but Congress represented public opinion in declaring the road across the river equally a highway.

The height of steamboat chimneys is an indefinite thing; and since it is well known that chimneys can be lowered with very little trouble, it may well be asked why it is not as easy for the boats to lower their chimneys as for the public to be deprived of a bridge. These contrarieties of interest often happen in the public business, and common sense declares that where they can be reconciled they should be. In the case of steamboats they can be, by simply lowering their chimneys, when they are of such inordinate height. But there is another objection to bridges, when the height is overcome. Sometimes piers are required, as in the case of the Rock Island bridge over the Mississippi. To this bridge the city of St. Louis makes strong complaint, that its piers endanger vessels. If the spaces between were very narrow this might be the case; but if full room be allowed for the passage of the largest steamers, this is an untenable objection. It may require some care in the pilot of the boat to avoid the possibility of any accident; but is it not better this care should be used than that railroad and highway should be cut in two by a river which may be bridged? The public are inter-

ested in both the river and the railroad; but is it not plainly easier for a steamer to take a little extra care in passing, than that the public should be wholly deprived of a bridge? The Rock Island Bridge Company has published a tabular statement, by which it appears that steamboats were really not endangered at all by the bridge, where ordinary care is used.

The Cincinnati Bridge Company will build their structure high enough for the passage of steamboats at the highest water, and thus obviate all objections. But, while the company will do this, it seems to have done more than reason requires. The Ohio is not at its flood, on an average, ten days in the year. Those boats which want to pass then should be required to lower their chimneys, which could not be more than an average of once a year to each boat. For this brief time, and for such a slight inconvenience for the boats, the bridge must be raised *twenty-five feet higher!* We submit, then, that in balancing two opposite public interests, this is requiring an unreasonable sacrifice on one side. Whether this be so or not, however, it seems certain that bridges will be built over the Ohio, the Mississippi, and all other western streams.

We may here mention some other prominent points on the Ohio where railroad bridges are imperatively required:

1. A bridge is required at *Steubenville* for the Pittsburg, Steubenville & Ohio Railroad. This would make that route complete from Philadelphia to the Ohio, at Cincinnati, and to the Mississippi.

2. A bridge is required at or near *Parkersburg*, Virginia. This is absolutely necessary to connect the Marietta Railroad with the North Western Railroad, and with the Baltimore & Ohio Railroad. It is now settled that the Baltimore route is to be one of the heaviest freight routes to the West. The bridge is necessary to make that transit easier, and indeed to make it without interruption. From Baltimore to Cincinnati is but 570 miles, and there is no other route can compete with that in point of shortness.

3. A bridge is now building at *Cincinnati*; but, from its great height, we apprehend, is not suitable for railroad purposes. Below the city, however, some two or three miles, is a site which will accommodate the railroad transit trade, North and South.

4. At *Louisville*, although the banks of the river are much lower, we think there may be made a railroad bridge without interfering with navigation.

5. At *Evansville* there should be a bridge; for there is and will be one of the great crossing points of the Ohio.

6. We know the extreme difficulty of a bridge at Cairo; but we believe that on parapets high enough to secure railroads there



may be constructed abutments, on which, ascending by a moderate grade, a bridge may be built. In all probability it would cost much more there than at some other points; but it would repay the cost.

In concluding these remarks, we may add that bridge architecture, on a large scale, is hereafter to become a very important business in this country.

**ROADS TO THE PACIFIC.**—The appropriations for a wagon road to the Pacific have passed Congress, and we are to have two routes: one from Fort Kearney, via the South Pass, to the eastern boundary of California, near Honey Lake; and another from El Paso, on the Río Grande, to Fort Yuma, the most important, and indeed the only trading spot on the Colorado. There is also to be a branch from Fort Defiance, in New Mexico, to the Colorado, at the mouth of the Mohave river. A bill has also passed for the establishment of a mail route by a line of stages in our own territory. We regard these as the prestiges of success to the grander and more important project of a Railroad to the Pacific. They are the forerunners; and the railroad must soon follow.

The bills, as thus passed, also indicate a policy that we have always recommended. It is the true policy for the government, and we trust will prevail. It is simply this, that the general government should provide roads only through territory exclusively its own; and that the States should provide for themselves. We are glad to see this position taken, and believe it will accomplish all that is needed.

**SONORA EXPLORING AND MINING CO.**—The Sonora Exploring and mining Company of this city have received dispatches from their agent in the Gadsden purchase, that the Company has acquired the well known Arivaca Rancho. This Rancho is situated to the west of Tubac, and is the most desirable mining point in the whole purchase. It contains twenty-five silver mines, and its agricultural lands are of the best character.—The mineral veins are all rich in silver ore, and well opened originally by the Spaniards. The smelting ovens of the Company were expected to be in blast by the first of January last.

Our new Stock Table will be published next week. We hope to make it one of great interest to our readers.

The American Journal of Science and Art, better known as Sullivan's Journal, for March, contains much very interesting scientific matter.

**PITTSBURG, FT. WAYNE & CHICAGO R. R. CO.**—AUDITOR'S DEPARTMENT, PITTSBURG, Feb. 1857.—The earnings of the Pittsburg, Ft. Wayne & Chicago Railroad Company for the month of January were as follows, viz:

Freight.....	\$64,518 74
Passengers.....	43,306 24
Express.....	4,139 59
Mail.....	3,490 63
Total.....	\$115,454 90
Total earnings for same month in 1856.....	79,513 75
Increase (45½ per cent.).....	\$35,941 15

## Railroad Duplicotypes.

### No. LI.

#### NEW JERSEY R. R. & TRANSPORTATION CO.

The report of this company is dated November, 1856. The following are its officers:

President—JNO. S. DARCY, Newark, N. J.

Treasurer—HENRY J. SOUTHMAYD, Jersey City, N. J.

Secretary—F. WOLCOTT JACKSON, Newark, N. J.

Superintendent and Executive Officer—JOHN P. JACKSON, Newark, N. J.

#### DIRECTORS.

JOHN S. DARCY, Newark, N. J.

JOHN P. JACKSON, "

STEPHEN WHITNEY, New York.

DUNLEY S. GREGORY, Jersey City.

HAMILTON FISH, New York.

JOHN ACKEN, New Brunswick.

A. O. ZADINSKIE, Jersey City.

JNO. J. CHETWOOD, Elizabeth.

HENRY R. REMSEN, New York.

The annual meeting of the stockholders is held on the 4th of June.

The CAPITAL STOCK is as follows:

Number of shares.....	69,700.
Price per share.....	\$50.
Capital.....	\$3,485,000.
Dividend.....	5 percent. semi-annual.
Am't of last dividend.....	\$174,120.

The DEBTS of the road are:

Domestic funded debt.....	\$690,000.
Interest.....	6 and 7 per cent.

#### RUNNING EQUIPMENTS.

No. of locomotives.....19.

Passenger cars, 1st class.....35.

" " 2d ".....25.

Baggage ".....8.

Express ".....6.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends Jan. 1:

#### RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$655,752 89	653,192 00	635,921 95
Freights.....	64,507 97	73,116 40	78,883 84
Mails, rents and other sources.....	90,374 04	97,724 53	146,708 57
Cost of operation, including all expenses of maintaining road, salaries, &c.....	\$319,516 82	283,385 20	260,766 77

#### DETAILS OF CONSTRUCTION.

Length of road.....	33 40-100 miles.
Termini.....	Jersey City and New Brunswick.

Gauge.....	4 feet 10 inches.
------------	-------------------

Single track.....	12 miles.
-------------------	-----------

Double track.....	21.40 miles.
-------------------	--------------

Sidings.....	About 5 miles.
--------------	----------------

Length of rail bars.....	21 to 25 feet.
--------------------------	----------------

Weight per yard.....	72 lbs.
----------------------	---------

Kind of iron.....	American and English.
When laid.....	Relaid during last 10 years.

Kind of rail.....	H.
-------------------	----

Wear and tear.....	15 per cent.
--------------------	--------------

Ties.....	Wood.
-----------	-------

Kind of wood.....	White oak.
-------------------	------------

Length.....	9 feet.
-------------	---------

Size.....	6 to 8 inches.
-----------	----------------

How often changed.....	Once in 10 years.
------------------------	-------------------

Ballast used.....	Gravel.
-------------------	---------

Fuel.....	Wood and Coal.
-----------	----------------

Cost per annum.....	\$68,693 93.
---------------------	--------------

No person killed or injured while occupying his seat in the cars since the commencement of the road, out of over 25,000,000 passengers.

### No. LII.

#### LOWELL & LAWRENCE R. R.

The report of this road is dated November 30, 1855. The following are its officers:

President—SINNEY SPALDING, Lowell.

Treasurer, Secretary and Superintendent—F. N. NOURSE, Lowell.

#### DIRECTORS.

SIDNEY SPALDING,

HORACE HOWARD,

ISAAC FARRINGTON,

OTIS ALLEN,

A. W. BUTTRICK,

WM. M. KIMBALL.

The ANNUAL MEETING of the stockholders is held on the first Monday in January.

The CAPITAL STOCK is as follows:

Number of shares.....	2,000 issued.
Price per share.....	\$100.
Capital.....	\$300,000.
Interest.....	\$9,748 05.
Am't of last dividend.....	\$8,000.

The floating debt of the company is \$40,000.

#### RUNNING EQUIPMENTS.

Number of Locomotives.....3.

Passenger cars.....3.

Baggage ".....1.

The following are the results of operation for the years 1854 and 1855:

#### RECEIPTS.

	1854.	1855.
Passengers.....	\$38,713 00	\$33,036 13
Freight.....	11,941 46	11,509 35
Mails.....	700 00	700 00
Express.....	500 00	500 00
Miscellaneous.....	4,282 15	4,489 23
Cost of operation.....	\$32,812 30	\$36,185 58

#### DETAILS OF CONSTRUCTION.

Length of road.....	12.35 miles.
---------------------	--------------

Termini.....	Lowell and Lawrence.
--------------	----------------------

Gauge.....	4 feet 8½ inches.
------------	-------------------

Sidings.....	2 miles and 1500 feet.
--------------	------------------------

Length of rail-bars.....	14 to 18 feet.
--------------------------	----------------

Weight per yard.....	58 lbs.
----------------------	---------

Kind of iron.....	English.
-------------------	----------

When laid.....	1848.
----------------	-------

Kind of rail.....	T.
-------------------	----

Ties.....	Chesnut.
-----------	----------

Length.....	7 feet.
-------------	---------

Size.....	6 by 5 inches.
-----------	----------------

How often changed.....	7 years.
------------------------	----------

Ballast used.....	Gravel.
-------------------	---------

Kind of fuel.....	Wood.
-------------------	-------

Cost per annum.....	\$8,000.
---------------------	----------

Telegraph on road.....	
------------------------	--

### No. LIII.

#### MAD RIVER & LAKE ERIE R. R.

The report of this company is dated November 28, 1856. The following are its officers:

President—RALPH E. RUNKLE, West Liberty Ohio.

Treasurer—SAM'L HENSHAW, Boston, Mass.

Secretary—JAS. A. WALLIS, Sandusky, O.

Superintendent—C. C. DENNIS, Dayton, O.

#### DIRECTORS.

R. E. RUNKLE, West Liberty, O.

H. WILDMAN, Sandusky, O.

ORAN FOLLETT, "

ISAAC S. GARNER, Bellefontaine, O.

O. W. PATTERSON, Cincinnati, O.

S. C. PARKHURST, "

NELSON P. STEWART, Detroit, Mich.

ELISHA C. LITCHFIELD, New York.



JNO. P. YELVERTON, "  
NATHAN STARR, "  
SAM'L HENSHAW, Boston, Mass.  
DAVIN A. NEAL, Salem, "  
MARK HEALEY, Boston, "

The ANNUAL MEETING of the stockholders is held on the fourth Wednesday in August.

The CAPITAL STOCK is as follows:

Price per share.....\$50.  
Capital.....\$2,697,090.  
Am't of last dividend...10 per cent.

The DEBTS of the road are:

1st mortgage.....\$218,000.  
Interest.....7 per cent.  
2d mortgage.....\$1,000,000.  
Interest.....7 per cent.  
When due.....1866.  
3d mortgage.....\$1,000,000.  
Interest.....7 per cent.  
When due.....1875.  
Dividend Bonds.....\$222,500.  
Interest.....6 per cent.  
When due.....1860 and 1862.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends July 31:

#### RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$287,503 41	251,771 77	234,266 49
Freight.....	384,028 82	293,007 74	324,619 77
Mails.....	17,425 00	18,300 00	18,300 00
Express & Miscellan's	4,780 00	2,370 00	10,050 31
Cost of operation....	\$376,050 31	360,056 67	424,959 07

Telegraph on road.

#### No. LIV.

### NEW YORK, PROVIDENCE & BOSTON R. R. OFFICERS.

President—GILES F. WARD, Saybrook, Conn.  
Treasurer—FRANCIS AMY, Stonington, "  
Secretary—GEO. C. SCHWACOFER, New York city.  
Superintendent—A. S. MATHEWS, Stonington, Conn.

#### DIRECTORS.

G. F. WARD, Saybrook, Conn.  
THOMAS TILESTON, New York city.  
MATHEW MORGAN, "  
SAM'L D. BABCOCK, "  
WM. H. MACY, "  
HAM. BLYDENBURGH, "  
WM. F. CARY, "  
SAMUEL SLOAN, "  
N. F. DIXON, Westerly, R. I.

The ANNUAL MEETING of the stockholders is held on the last Tuesday in September.

The CAPITAL STOCK is as follows:

Number of shares.....15,080.  
Price per share.....\$100.  
Capital.....\$1,508,000.  
Interest.....2½ per cent.  
Am't of last dividend...\$37,692 30.

The DEBTS of the road are:

1st mortgage.....\$411,700.  
Interest.....6 per cent.  
When due.....1863.

#### RUNNING EQUIPMENTS.

Number of Locomotives.. 9.  
Passenger cars, 1st class 13.  
" " 2d " 1.  
Baggage " 3.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends Aug. 31st:

#### RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$175,439 04	154,667 18	144,339 76
Freight.....	102,627 63	107,775 73	96,373 24
Mails.....	5,000 00	5,000 00	5,000 00
Cost of operation....	\$145,101 47	175,502 42	181,034 29

#### DETAILS OF CONSTRUCTION.

Length of road.....50 miles.  
Termini.....Providence.  
Gauge.....4 feet 8½ inches.  
Single track.....50 miles.  
Sidings.....2 "  
Length of rail-bars.....15 to 21 feet.  
Weight per yard, rail...56 to 63 lbs.  
Kind of iron.....English.  
When laid.....1836.  
Kind of rail.....T.  
Ties.....Chesnut & White Oak.  
Length.....7 feet.  
Size.....6 by 7 inches.  
How often changed.....In 7 years.  
Ballast used.....Gravel.  
Fuel.....Wood.  
Amount per annum.....5,500 cords.

The large increase in the cost of operating the road which will be noticed in 1855-'56, as compared with 1854, was in consequence of extensive repairs having been made on the road, principally in relaying new rails, ties, &c., which was all paid for out of the earnings of the company, and charged to operating expenses. The company has no floating debt, and no construction account open.

The extension of the New Haven & New London Railroad to Stonington will be consummated during the coming year, when this road will form part of a complete land route, and the shortest and most expeditious between New York and Boston. When this connection is made the income of the company will be very materially increased. The piece of road to be built is 10¾ miles in length—from New London to Stonington, Conn.

#### RAILROAD BREVITIES.

—LEXINGTON AND DANVILLE R. R.—Gen. Coombs, the President of this road, has negotiated 230 of the \$1,000 bonds of this company, at 75 per cent. Of the proceeds of this sale, \$29,900 is to be paid on April 1, and one-fifth every sixty days after that time. The company has purchased 600 tons of iron, now lying at New Orleans.

—NORTHERN CENTRAL R. R., MD.—The net revenue of this road for the past year has been \$301,980 25. The expenses of the company were 54.6 per cent. of the gross income. This is a large per centage, and is accounted for on the ground of heavy repairs to road and machinery.

—BLUE RIDGE R. R.—It is stated that active exertions are making to secure the second subscription of the State of South Carolina to this enterprise. If the conditions are fulfilled, the company will have additional State aid to the amount of \$500,000.

—SPARTANBURG AND UNION R. R.—The directors of the South Carolina R. R. Co. are considering the expediency of taking an amount not to exceed \$100,000, of the bonds of the above company.

—GALENA AND ROCK ISLAND R. R.—The act incorporating the Galena and Rock Island Railroad Company constitutes the following as Directors: Dr. J. C. H. Hobbs, S. W. McMaster, E. H. Bebe, C. B. Denio, and two citizens of Rock Island. It is purposed, we understand, to make an arrangement with the Rockford and Mississippi Railroad Company to use their track, temporarily, from New Albany to Rock Island, leaving only about forty miles of road to be constructed by the G. and R. I. R. R. Company.—*Galena Adv.*, 28th.

—GREAT WESTERN R. R., CA.—The mechanics on this road held their annual festival at Hamilton on the evening of Feb. 20.

—CHERAW AND COAL FIELDS R. R.—The North Carolina Legislature, at its recent session, chartered a company to build a railroad from Carabnton, in that State, to the State line, in the direction of Cheraw.

The leading features of the charter are these: It is to continue for ninety-nine years, and its business is not to be taxed above that of all other roads in the State. Its track is to be the South Carolina gauge, so that coal trains may pass to the seaboard without changing cars.

—SOUTH CAROLINA R. R.—The following gentlemen have been elected officers of this road for the current year:

**Road Directors.**—Wade Hampton, James Rose, John Caldwell, L. J. Patterson, G. A. Trenholm, W. C. Dukes, C. T. Mitchell, Andrew Wallace, Alfred Huger, C. J. Shannon, C. M. Furman, Henry Gourdin, W. C. Gatewood, A. Burnside, C. R. Bryce.

**Bank Directors.**—James Rose, J. S. Cohen, G. D. Hopley, W. J. Grayson, W. A. Pringle, P. J. Porcher, Wm. Patton, W. C. Gatewood, G. B. Locke, O. B. Hilliard, H. T. Hall, J. C. Cochran, B. H. Rice.

The financial operations of the company for the past year have been as follows:

Discount line for 1856.....	\$2,752,982 19
Sterling Exchange purchased.....	396,926 92
Sterling Exchange sold.....	282,150 31
French Exchange purchased.....	191,300 72
French Exchange sold.....	190,619 44
Domestic Exchange purchased.....	2,009,056 79
Domestic Exchange sold.....	2,458,168 00
The surplus at credit of Profit and Loss account on 1st Jan., 1856, amounted to ...	\$44,233 77
To this add Profit of past year.....	72,931 21

From which deduct Dividends paid..... \$117,664 98  
52,348 50

Leaving surplus profit of the Bank, 1st January, 1857..... \$64,916 48  
No loss has been sustained in exchange, and the suspended debt of the Bank has been considerably reduced during the past year.

The charter of the Bank expires in 1860. The President suggested that in their application to the next legislature for a new charter, that the capital be limited to one million of dollars, which proposition was rejected by the Board.

MEMPHIS AND LITTLE ROCK R. R.—The time for completing the first section of this road, from Memphis to the St. Francis river, has been extended by the legislature of Arkansas to the 1st of December, 1858. And that of completing the second division, from the St. Francis to the White river, to Jan. 1, 1860. The city of Little Rock has also ordered the tax for the payment of the interest on its subscription of \$100,000 to be levied.



## Railroads.

### SANDUSKY, MANSFIELD & NEWARK R. R.

*First Annual Report of the President and Directors of the Road, as Reorganized July 25th, 1856—WM. KEY BOND, President.*

This is a well-arranged and concise document, containing much matter of interest to stockholders and bondholders. It opens with a brief history of the road prior to its sale, with its franchises under the foreclosure of the mortgage bonds, and the agreement of compromise between the bondholders and stockholders, which took place on the 22d day of July last—being purchased by certain persons in trust for the company.

The capital stock of the company, under the compromise, is not to exceed \$1,110,000; and the debt secured by a single mortgage on the entire road and its equipment and franchise, is \$1,290,000—this sum being the aggregate of the first mortgage of each of the three several corporations before the consolidation. The Trustees named in the mortgage are Wm. T. Hooker and James T. Soutter, of New York, and Henry Stanbery, of Cincinnati. The bonds, which are for \$1,000 each, bear 7 per cent. interest, with semi-annual coupons attached, payable at the office of the Ohio Life Insurance and Trust Company, in the city of New York, in each year, on the first days of January and July, until the first day of July, 1875, when the principal is to be paid.

By the plan of compromise, the sum of \$200,000 was to be paid out of the net earnings of the road for the (then) next two years, on a certain class of the "floating debt" of the old company. Nearly half of this sum has already been paid, and the balance of that half it will soon be in the power of the Board to discharge. For the remaining \$100,000 bonds have been issued, with interest at 6 per cent. per annum, payable semi-annually, coupons attached, and delivered to George B. Wright, Receiver of the old company. The principal of this debt is payable in four equal installments; the first on the 25th July, 1858, and on the same day in each successive year until the 25th July, 1861.

The aggregate debt of the company is, therefore, \$1,390,000, and the total semi-annual interest to be provided for is \$48,150.

The floating debt is only about \$18,000, which the Board expect to pay off at an early day.

A resolution of the Board proposes to create a Sinking Fund after the 1st day of January, 1858, amounting to 10 per cent. of the net earnings of the company, after paying the interest on the mortgage bonds, for the payment of the principal of said bonds. This fund is to be invested in the purchase of the bonds, at the current market rates, whenever

they can be bought at or below par—the bonds so purchased to be cancelled.

The company, as reorganized, took possession of the road on the 25th July, 1856, from which day to the 31st December inclusive, being five months and seven days, the gross earnings were \$150,028 80. The aggregate earnings during the year 1856 were \$297,483 62. The gross earnings for the six years last past were as follows:

1851.....	\$237,146 61	1854.....	\$329,025 14
1852.....	208,458 36	1855.....	267,204 88
1853.....	313,959 73	1856.....	297,483 62

The year 1854 appears to have been the culminating point in the earnings of the road. The causes of the increase and decrease in the earnings, shown by the above table, is very satisfactorily accounted for in these paragraphs, which we quote from the Report:

#### CAUSES OF INCREASE AND DECREASE IN THE EARNINGS.

"An important source of the increased earnings in the years 1853 and 1854 is found in the extraordinary wheat crop of the year 1853, which added greatly to the business of the road, its benefits extending even into the year 1854. And a subsequent decrease in the earnings is justly ascribed to the failure of the grain crop, wheat particularly—it being a well known fact that there has not been an average crop of that grain on the line of this road since the great crop of 1853.

Again, a further cause of increase in the earnings in the years 1853 and 1854, is known to have been the opening of the Ohio and Pennsylvania Railroad from Pittsburg to Mansfield, on this road, which at once brought to us a large accession of business.

Since that period, however, the completion and extension of a number of roads, both in Ohio and Indiana, forming a union of connecting links east and west, have brought many of them into competition with us in the business which, for a year or two, we had almost the exclusive possession of; and, without naming several other instances, it may be safely said that a leading cause of the decrease in the earnings of this road is found in the extension of the Ohio & Pennsylvania Railroad west of Mansfield.

And, finally, in its discontinuance of close connection with us, and the formation of new connections westward via. Fort Wayne to Chicago. So, too, whilst the Ohio Central Road did not form other arrangements west, excluding our connection at Newark, this road had an addition to its business from that source; but now that business is measurably taken from us.

These changes have not been made without constant and earnest effort on our part to avert them; and we have to regret this the more as it seems to us our connections with these roads justly offered to them high inducements for their continuance.

Another cause for the falling off of the business of the road, in its freights, is ascribed to

its embarrassed condition, but particularly to its bad name and credit, growing out of losses in wheat shipped upon it.

The Directors are happy to say, however, that from this last embarrassment the road is now free, and is rapidly gaining a good name and the kind favor of all who do business with it."

In reference to the *prospective* business of the road the Report says:

"It is believed that every just effort has been made during the past year, by the Superintendent and all others connected with the road, to manage its concerns with strict economy, and, at the same time, to meet any expense or personal exertion which seemed likely to increase its business. An appeal is made to the results already given to sustain this position.

Our connections with other roads have been before alluded to, and will be again further noticed.

The chief ground of hope in road connections is the completion of the Scioto & Hocking Valley Road, which it is sincerely thought will bring a large accession to our business.

That road commences on the Ohio river at Portsmouth, and is designed to have its northern terminus in connection with us, at Newark.

The gauge of the two roads is the same; they will form a complete line from Lake Erie to the Ohio river, traversing a rich mineral district of country, abounding in iron and coal, and in several parts of it yielding large agricultural products.

At this time the Scioto & Hocking Valley Road is in successful operation fifty-six miles, between Portsmouth, its southern terminus, and Hamden, in Vinton county, Ohio.

The middle portion of the road is said to be in a state of forwardness. The distance from Hamden to Somerset, in Perry county, is fifty-five miles—of which twenty-seven miles are graded and ready for the iron. The balance, or northern section, say from Somerset to Newark, our southern terminus—twenty-five miles—is also graded and ready for the rail. Even this portion completed would add materially to our business.

Perry county, just mentioned, is in many parts of it rich in agricultural products, and will find our road its most convenient outlet.

This section of road would bring us to part of the mineral wealth alluded to.

It will thus be seen that great advantages may accrue to us if that connection can be made; and it is with pleasure that this Board has recently heard from the President of the road, E. A. Spencer, Esq., who has been in New York to invoke pecuniary aid, that he is greatly encouraged in his hopes of success.

If that work can be completed, even to Somerset, it will in effect add just so many miles to this road, which we can operate with our



equipment without much additional expense, and with great advantage to both companies.

Some hope is cherished, too, that we may be able to make a connection mutually advantageous between this and the Steubenville & Indiana Road, which at present is in operation at Steubenville, on the Ohio river, to Newark, before named. That road is looking to a connection with Pittsburg—passing through a part of Virginia sometimes called the Pan Handle—and recent accounts give hope of its early completion.

It may be justly assumed that for travelers arriving at Newark, and wishing to go to Chicago, or in that region of country, our road offers, in the comparison of distance, quickness of speed, certainty of connection, comfort to the passenger, and beauty and variety of country, greater inducements than to continue west from Newark via. Columbus.

And what is said in relation to travelers from Newark may, with little alteration, be urged upon those who arrive at, and wish to go from Mansfield to Chicago. By careful inquiry, the traveling public will soon discover such to be the case.

Again, the advantages which this road possesses, in its near and more ready connection with the Lake, strongly recommend it for the transportation of agricultural products and other heavy freights to the point of navigation, always desired on account of its comparative cheapness.

It is necessary for us, therefore, by every just and fair means, to present these pretensions to the public in some ready and tangible shape.

Our friendly relations have been preserved with all these roads, and nothing should be unnecessarily done to disturb that feeling. An honorable rivalry and fair competition may, however, be entered into without ill nature or hostility.

This competition may not bring us success; but in fair effort it may be sought, and we hope at least to show that we deserve it. If we enter into it, it must be done with energy and active spirit, but with fairness. We must take care, too, that a business thus sought after shall not be acquired at a cost which proves a loss instead of a gain. This state of things has been realized by many roads; and we need not go out of Ohio, nor far from our own road, for an example, were it necessary to name or find one.

This road has large local advantages, both in freight and passengers; but even many of these are now partially impaired by the roads to which we have alluded, and by the Cleveland, Columbus & Cincinnati Road, which crosses our track at Shelby.

The line of this road passes through five wealthy and populous counties, abounding in rich and well cultivated land; and, besides touching or running near many other smaller

towns, connects directly with Sandusky, Mansfield, Mount Vernon and Newark, which have high rank in business and population among the leading cities and towns of the State.

#### PROSPECT OF DIVIDEND.

Something may naturally be expected to be said on the prospect of a dividend, or the probable time when it may be expected.

The Directors would gladly speak encouragingly on this subject; but they can only submit facts and figures, and leave others to judge of the prospects.

The gross earnings should not be set down at a higher figure than \$300,000, and this must not be too confidently relied on; that amount was not quite reached last year.

Here may be properly submitted the probable demands which must be met:

The current expenses are to be provided for. These will be at least equal to half the earnings—and with some roads it is not quite enough.

Some bridge-building and other repairs yet remain to be done, as will be seen specified in the Superintendent's report.

The interest, as already specified, has to be provided for, amounting to \$96,300 per annum. One-fourth of the domestic debt, say \$25,000, falls due on the 25th day of July, 1858, and so on annually until July, 1861. It is true the interest of this debt will be reduced from time to time, as the principal shall be paid.

To all these demands must be added the probability of an expenditure for new machinery and equipment, which will certainly be needed before a great while, if not immediately.

With this exhibition, it may be plainly seen that no dividend can be made for some time to come. But the credit of the road is now fully restored, and it is hoped that all these engagements will be promptly met, without creating any debt.

By skillful, vigilant management, and a rigid discipline and economy, and with the completion of the Scioto & Hocking Valley Railroad, a brighter day may soon open."

We regret that we cannot give more in detail the facts embodied in the Report. We refer those interested in obtaining further information to the document itself, which, in its candid and clear statements, gives a satisfactory exposition of the present financial condition and future prospects of the road. The importance of the completion of the Scioto & Hocking Valley Railroad—a point upon which the Report dwells at some length—cannot be well over-estimated, whether considered as affecting our immediate local interests or those of the S., M. & N. R. R.

The earnings of the Cleveland and Toledo R. R. for the 2d week in February were \$19,146.

#### THE OPELOUSAS RAILROAD.

The last or fifth annual report of the President and Directors of this road show it to be in a satisfactory condition, financially, and in a promising state of forwardness towards ultimate completion—forwardness, at least, considering the comatose state in which railroad enterprises in general have languished for several years past in this State.

Reviewing the operations of the Company for 1856, the report informs us that the idea entertained in the beginning of the year of discontinuing the road for a time at Bayou Boeuf, and commencing a separate link at New Iberia to connect with Opelousas, the Directory deemed it expedient to abandon, and to complete the road and place it in running order between Algiers and Berwick's Bay. After observing that the latter measure would soon be accomplished, and the connection complete in March next, the report continues:

We will then have a well built and a well equipped road from Algiers to Berwick's Bay, susceptible of separate and profitable management, until the connections can be made beyond.

The extension of the road to Berwick's Bay has ever been considered as of the greatest importance to the city of New Orleans, in view of effecting a shorter and safer communication than we have heretofore had with the ports of Texas and Mexico, by the establishment of a line of steamships in connection with it. The distance from New Orleans by the railroad to Berwick's Bay, and thence to the bar of the Atchafalaya, is about the same as from the city to the South-west pass of the Mississippi River, and the saving of distance by sea to Galveston is about 160 miles, besides avoiding the more dangerous part of the voyage. The attention of the Board was, therefore, early given to the advantages likely to result to the road by an arrangement, the object of which would be to divert the *whole travel* and a portion of the freight, from the longer and more hazardous route, to the shorter and safer one.

The report then alludes to a proposal made by the Southern Steamship Company, and accepted by the directory, for running one ship in connection, with the road to Galveston, with the privilege of stopping at Sabine Bay, and providing that the passenger fare by the river and road routes should be the same, unless ships should be placed on the river by other parties in competition with them. So unpromising, however, did this arrangement appear afterwards, that it suited both parties to agree to terminate it by thirty days notice from either side; and a contract was subsequently entered into, in Nov. last, with Cornelius Vanderbilt, by which the latter binds himself to run a line of steamships semi-weekly, tri-weekly or daily, according to the exigencies of trade, between the terminus at Berwick's Bay and the ports of Texas; and two ships, observes the report, now being built expressly for this business, will be placed on the line by the 1st of March. This agreement is to exist and to be exclusive as to the party of the second part (Vanderbilt) until the 1st of March 1862, when it may be renewed for a further period of five years, unless the party of the first part elect to purchase at that time the steamers and other property used by the second party, at a valuation to be fixed by three disinterested appraisers. With respect to passage and freight on the joint through line it is stipulated as follows:



The through rates of passage and freight between New Orleans and said Texan ports is to be regulated and determined by the party of the second part, of which through rates the parties of the first part are to receive twenty per cent. of the gross amount of passage money, fifty per cent. of the gross amount of freight money; and the party of the second part is to receive eighty per cent. of the gross amount of passage money, and fifty per cent. of the gross amount of freight money. Live stock which is to constitute no part of the through business provided for by the above proportionate division, is to be transported by the parties of the first part to and from the said steamers, from and to New Orleans, at the lowest rates—not to exceed two dollars per head for beef cattle.

It is also stipulated that the party on whose division of the line losses and damages occur, shall be responsible for the same exclusively.

The report expresses the opinion that the road from Algiers to Berwick's Bay—complete, self-supporting and remunerative as it will be, with the trade and travel of Texas and Mexico flowing through it, and the business to be expected from the successful prosecution of the Tehuantepec enterprise—will, in connection with the steamships, produce an income of six per cent. on its cost; cause a large appreciation of the stock, and make the unsubscribed portion of the capital (about \$1,700,000) available in payment for work. Furthermore, the conditional subscription of the State would then be received, and the whole (equivalent to about \$2,000,000) be added to the present means of the Company, realizing the full capital of \$6,000,000.

As to the financial condition of the Company, it appears that, thus far, they have realized from all sources, in cash, about \$2,600,000; for which, notwithstanding many drawbacks, they are able to show a road completed to the Bay—a distance of 81 miles, with 11 miles of side tracks and three expensive bridges—at a cost of about \$2,200,000 (or 91 miles, or about \$24,176 per mile—probably as cheap and good a road (so says the report) as any in the United States. In addition, continues the report:

We have lands at Gretna; swamp lands enough for all the timber we may need; depots at Algiers, Des Allemandes, Lafourche, Terrebonne, Tigerville, Bayou Boeuf, and will have one to build at the Bay, with spacious wharves at the termini of the road, at a cost of about \$200,000, and a full equipment at a cost of \$237,000. Beyond this, the credits yet unrealized and the stock of material on hand amounts to \$713,535.

As to the past year's business of the road, we quote further from the report:

The result of the year's business, as compared with the previous year, is very satisfactory: The gross earnings of the passenger trains in 1856 amount to..... \$84,293 48  
In 1855..... 56,316 11  
Increase..... \$27,977 37  
Or about 49½ per cent.  
The gross earnings of the freight trains the past year were..... \$122,071 96  
In 1855..... 59,979 62  
Increase..... \$62,092 34  
Or about 103½ per cent.

The transportation expenses of the passenger trains (\$22,230 98) are equal to about 26½ per cent. of the gross earnings, and of the freight trains (\$72,426 87) equal to 59½ per cent. The total expenses on the whole gross earnings of passenger and freight trains taken together, amount to 45 7-8 per cent. A very large increase of business may be

carried on, particularly in passengers, with very little additional expense, and this important advantage we may reasonably expect to realize the coming year.

The total amount of sugar carried on the road was 19,452 hhds.; molasses, 32,286 barrels, and 2,311 half barrels; beeves and calves, 12,687; lumber, 156,127 feet.

The report of Mr. Bayley, the Chief Engineer of the road, contains some very interesting facts and suggestions with regard to the best route for extending it into Texas.—He is in favor of the shortest and cheapest route by way of Iberia to the Sabine river. He estimates that this connection could be made for \$1,995,000, or for \$15,000 per mile, while the lands to be realized from the United States grant he thinks would reach 505,000 acres, which, at \$5 per acre, would yield \$2,525,000. With regard to the importance of the trade of Texas to New Orleans, and the best means of securing it, Mr. Bayley makes some just and timely observations, and we close by a short extract in those connections:

"The commerce, the trade of New Orleans requires that the immense business of Texas should be secured to her, particularly when it is certain to be diverted by other and rival routes to the West and North, unless the Opelousas Road is so constructed as to make it the interest of Texas to ship to and trade with New Orleans. This can only be effected by affording the shortest and most direct route from Texas to New Orleans, thus cheapening the cost of transportation and gaining time. These conditions are gained by building your road to the Sabine on the route for it mentioned, viz: from Opelousas to the Sabine at Thompson's Bluff, about four and a half miles below the parallel of latitude 31 degrees north. The whole distance from New Orleans to the Sabine will be about 257 miles. Between New Iberia and Sabine, by this route, the road can be built for less than \$15,000 per mile, including iron, track-laying, cross-ties, &c.; or for everything except equipment. It will be apparent at a glance on the maps of Louisiana and Texas, that you will by this route connect New Orleans with the whole of Texas. From Sabine, at the proposed crossing, roads might diverge north, north-west, west, south-west and south, and thus penetrate every portion of Texas, and tap every road which is or ever will be built in that great state. No part of Texas will be unconnected with you, and roads are already chartered which will effect this. To strike Texas near latitude 32 degrees, would connect you only with Northern Texas, and inasmuch as roads are now being built and somewhat advanced, connecting the sea-board with Northern Texas, it is manifestly better to tap such roads by a short and cheap line, than to attempt to reach Northern Texas by first traversing the whole of Louisiana at a cost of from five to seven millions."

#### WABASH AND ERIE CANAL.

The people of Evansville have been investigating the causes why the Wabash and Erie Canal has not proved a profitable speculation. The report is signed J. Wesley Hughes, Chairman, and Geo. Foster, Secretary, and contains very serious charges against the management, and ones which are quite sufficient to ruin any work. While we believe that the day of use-

fulness of canal navigation is past, we yet think that while works are used at all, they should be kept in fit condition for the accommodation of those who employ them.

The charges of the committee are as follows:

1st. That in its construction there seems to have been a greater desire to build it cheaply than in such a manner as to render it permanent, and to meet the demands of its commerce and that of the country through which it passes.

2d. That at a point offering the greatest obstacle to its navigation (Pigeon Summit), the tow-path is built at so great a height above its level, as to require three times the force of teams to propel boats, as on other portions; and, that for want of trenches in this deep cut, to prevent the washing of the earth into the canal, bars are continually forming, rendering it impassable for boats with full freight; that this has been known both to the Engineers and Trustees for over three years, and that all the obstructions which this point has presented to its navigation, together with all the complaints continually made, have only been able within a few weeks past to procure an order for its partial remedy; hence we infer that our interests are studiously, or most carelessly neglected.

3d. That while the two lower districts are much longer than those above, the banks comparatively new, and from the character of the country and soil through which it passes, are much more liable to breaks, there is but one State boat for each division, while two to three times the force is employed on the shorter districts above.

4th. That from the fault in the original construction, or the management of the canal since, there are certain points in it, where the water has never been but little over two feet, even at its best stage, and generally under that, while the law requires of the bondholders that they shall furnish (casualties excepted), four feet of water, and that if those points were dug as deep as others, or kept well cleaned out, this quantity of water might be regularly furnished with much less danger to the banks, at other points, as there need not be so great a strain upon them, in order to give the necessary depth of water.

5th. That the Trustees or Engineers, in their management of this end of the canal, have inadvertently or intentionally so controlled it as almost entirely to cut us off from the benefits to be derived from its successful operation since its construction. That the Trustees and Engineers do not give enough personal supervision to, and consequently can not know the necessities and condition of these levels. That they rely too much for information on the reports of their superintendents, who being responsible for any mismanagement on their own districts, should not be relied upon for all their information, as no man is expected to criminate himself.

6th. That while from fifteen to twenty-five leaks may at any time be counted (as frequently has been) in a ride of ten miles on the tow-path, the powers that be, seem utterly indifferent to them, until sooner or later they cause breaks and suspend navigation.

7th. That the efficiency of the superintendents on the largest districts, which are on this end of the canal, is at times impaired by instructions from the Engineers to bring the expenditures on their districts under \$6,000, or equal to the salary of (or what seems to be)



two efficient officers, while from the Engineer's report, we see that double the amount is expended on the upper and older divisions of the canal, where the banks are more permanent.

8th. That the annual report of the Engineers, in our judgment, does not, by any means, account for the want of revenue received on the lower division on the proper ground: the true causes being, that the canal has been so unreliable, that shippers having lost largely by damage, detention to their produce and merchandise, have been compelled to seek some other mode of conveyance, even at greatly increased rates. *That confidence has been destroyed; that most of the boatmen have been ruined, or forced to abandon the trade; and that for about ten months of the year it was not navigable.*

9th. In confirmation of the foregoing, we herewith present you with a table of the arrivals and departures at this port for the years 1855 and 1856:

ARRIVALS.		1856.	1855.
From Terre Haute and above.....	4	49	
" Worthington.....	10	25	
" Newbury and below.....	85	157	
Total.....	99	231	
CLEARANCES.		1856.	1855.
To Terre Haute and above.....	8	47	
" Worthington.....	11	31	
" Newbury and below.....	91	159	
Total.....	110	237	

A large proportion of the above were cleared without cargoes, and many with and without cargoes, were unable to reach their port of destination, having in many instances to wagon freight over half the way, or return and ship by railroad.

10th. In conclusion, we affirm, as our sober conviction, that with proper efforts on the part of the officers intrusted with the management of the canal, this great work, heretofore a failure, could be kept in a navigable condition: the confidence of the shippers and the public restored; that this end of the canal, instead of being a public nuisance, would become a public blessing; instead of being an expence (as it ever must be under the present order of things), would, from its increased amount of tolls, etc., defray all its own expenses, and pay a handsome revenue into the treasury of the company, and that it has nothing to fear from competing lines of transportation, if kept in a navigable condition.

[From the London Post, January 27.]

#### THE BULLION YIELD OF THE WORLD, AND ITS EFFECTS ON TRADE.

A singular phenomenon seems likely to tax the ingenuity of the human race, though not without abundantly rewarding it. Between the undisturbed industry of Europe during forty years peace—to which the recent war acted more as a stimulant than a check—the enormous increase of a well-to-do population in the United States—a population which has trebled within that period—and the prosperity to which our rule has given rise in India, together with the peculiar action of the gold diggings on the markets of Europe—the wants of civilization, induced by these various causes, have outstripped production, and there are many articles, not only of luxury, but of primary necessity, of which there is not at present enough in the world. We have more than once adverted to the possible scarcity of one of our principal staples, and it is now almost at hand. We have but eleven weeks consumption of all sorts of cotton at present in the hands of spinners, and in all the ports of Great Britain, with the prospect of an American crop not

reaching three million bales; and so largely does cotton enter into clothing and furniture, that there is not a human being or a house in the kingdom unaffected by the supply of this indispensable article; and whilst the price of wool stood in December 1856, full fifteen per cent. higher than it did in December 1855, more widespread luxury has drawn heavily on the stock of silk; and thus, with the one exception, of flax, barely risen in value at all, every article of apparel is becoming scarce, and consequently dear; for it is but a few days ago that we recorded a meeting of bootmakers, who declared that, with the existing scarcity of leather, the prices they now charge are not remunerative, and they must raise them. Saddlery is also affected by the same cause. The extraordinary advance in the price of leather stated at that meeting, to amount to from 2½d to 10d and 11d a pound—from seventy to two hundred per cent—is accounted for partly by the comparatively deficient supply from Buenos Ayres, Australia and Russia, but principally to the increased demand in the United States, the expenditure of armies in the field, the consumption of the gold diggings and the discontinuance of the wooden shoe by the French peasant—which latter fact seems to indicate that it is not only the millionaire of the Bourse that is improving in circumstances in France. Not less is the deficiency in the better class, of food beginning to make itself felt. In that country the price of butchers' meat has risen to an extent to give some uneasiness to the government, not because there are fewer beasts or less forage, for agriculture never was so flourishing in France as it is now, but because there are a greater number of people who can afford to pay for the more expensive sort of food; and the like cause in this country produces the like effect, and causes that dearth of which we hear so many complaints; and there are many other indications too that the requirements of civilization have reached a point they never before attained.

The demand for paper, for instance, has exhausted the supply of rags, to the great discomfort of the Irish beggars, who can no longer "get themselves up" effectively, and are disappearing, we suppose in consequence, accordingly; and all the earth is ransacked for fibre to supply the failing material—and if people write more letters, consume more literature, and paper their rooms more universally, as well as use more of the costlier metals—such as copper, which is very dear, and tin, which some expect to reach £180 a ton—it cannot but be taken as an advance in civilization likely to lead to more artificial wants in other respects, which, however, could not be gratified without that improvement in the material prosperity of the people which we see going on before us.

That the sudden and unprecedented yield of the gold diggings has had much to do with the present state of things, it would be vain to deny. A purchasing power of £135,000,000 in eight years appearing in the markets of the world could not fail to exercise some influence, though in some degree it has only gone to replace the £35,000,000 of silver withdrawn from circulation to the bottomless pit of Eastern hoarding, which is causing so much inconvenience and alarm at present on the Continent—gone, it is said, unnecessarily, for it is asserted that if we would only issue gold coins perfectly pure instead of twenty-two carat, the natives of Hindoostan would hoard them, and the silver would be released; but upon the whole, we are inclined to think that the general prosperity has been more fairly earned than by the casual discovery of about twelve hundred tons of gold, or that it will be much enhanced by its continuance at the rate of about two hundred tons a year, which is nearly its present

production, and does not seem likely to diminish, though what effect it, in the course of years, may have upon prices, it would be difficult to predict.

We believe the prosperity which enables men to wear better clothes and more of them—to consume better food and plenty of it—to live in better houses and still apply much money to literature—to have its source in the greater perseverance, energy and application displayed in the industrial arts—to science applied to agriculture and augmenting production—to self restraint and sobriety, and especially to commerce—and what that may come to when all nations have become alive to their own interests with respect to liberating it from those shackles under which it groans in most countries in Europe, no man can say. All that we do know is that, under the disadvantage of what almost amounts to exclusion in many parts of the Continent, our exports have more than doubled in the last ten years, and that money at six or seven per cent. does not produce bankruptcies.

To those, however, who, living on fixed incomes, and those perhaps limited, may apprehend that their comforts may be materially diminished by permanent high prices, and who do not belong to the producing class, and consequently will not share in the advancing prosperity of that class, we would say that we do not share in their apprehensions. The same causes which have created the enormous purchasing power in the present day will bring in their train a corresponding producing power. Industry is the mother of cheapness—for this man who works hard eats little more than he who idles, and probably drinks less. Science, whether applied to machinery or to agriculture, facilitates and cheapens production; the saving effected by the rapidity of communication, is a saving of money, and of the hire of money, which latter consideration enters largely into the existing high prices and commerce, besides the competition which it engenders, will, as this area of its freedom extends, bring all nations into a community of enjoyment of the products of the earth in the greatest possible abundance at the smallest possible cost. Never, in fact, were the prospects of the human race more favorable; let us hope the fair promise may not be marred by the demon ambition.

The Harrisburg (Pa.) *Herald* says that bogus ten cent pieces, well executed, are in circulation in that town.

#### GEOLOGICAL REPORT IN RELATION TO THE SOILS OF KENTUCKY.

His excellency CHAS. S. MOREHEAD,  
Governor of Kentucky:

SIR: In conformity with the fourth provision of the act providing for a Geological Survey of the State of Kentucky, which requires the State Geologist to report from time to time, to the Governor, all important discoveries, who shall lay the same before the people, during the recess of Legislature, in some public Journal, I beg leave to submit the following:

#### SPECIAL REPORT.

Impressed with the importance of the Agricultural Department of the Geological Survey, and placing full reliance on the powers of the science of chemistry to be able to aid the Agriculturist in the most essential manner, by giving him substantial and minute knowledge in regard to the elements and causes of fertility and sterility, I have, from the commencement of the survey, paid special attention to the peculiar qualities of the various



soils and their adaptation to particular crops.

In order to be able to ascertain the proportion of the different ingredients contained in the various formations, samples were collected, not only from the individual members of each group, whenever they seemed to present any peculiarity of lithological character. But in addition to this selection, I have, besides, whenever favorable circumstances presented themselves, collected soils in sets of three or four from the same locality: one, the virgin soil, taken from the original forest; one from an adjoining old field on which the same growth of timber prevailed, as in the neighboring woods from which the virgin soil was taken; also the subsoil and underclay, whenever the latter presented any characteristic qualities.

By submitting each of these separately to chemical analysis, it was confidently hoped that results would be obtained which would show, not only the distinction between the chemical composition of the soil of the various formations, and the leading lithological subdivisions, but also the exact amounts of ingredients removed from the land long under tillage by the crops annually carried off.

From time to time, as these soils were collected, they were transmitted to the chemical assistant, Dr. Robert Peter, at Lexington. That able chemist has been most assiduously engaged in the chemical analysis of these soils; some of which have already been submitted in the first report, published last year.

Since the completion of that report he has finished the analysis of forty-one more soils, sub-soils and under-clays, which will appear in the next volume, to be printed according to the 5th provision of the act providing for the Geological Survey, and laid before the Legislature at their meeting in 1857 and 1858.

On this occasion I desire to call attention to a few of the results of the chemical investigation of the soils, which I deem to be of the highest practical value, inasmuch as they not only give the land owner a complete insight into the nature of his land, but point out precisely by what means he is to bring his soil up to any required standard of fertility, as well as the most economical method of attaining this object; at the same time specifying what must be added to restore land more or less exhausted or impaired in fertility by continuous cultivation, and the removal of successive crops.

In the first instance, I shall lay before you at this time the comparative analysis of the lower blue limestone of Woodford county, on the summits giving origin to Grier's and Clear creeks, in the vicinity of Versailles, and that immediately overlying the cellular magnesian limestones of Jefferson county, forming the fine, gently rolling tracts of land lying towards the heads of Floyd's Fork of Salt river, Goose and Harrod's creeks, where those members of the upper silurian system reach the surface, as they rise in an easterly direction from beneath the coralline beds of the falls of the Ohio river and Beargrass creek and the overlying black shales and silicious strata of the knobs, which latter formation, though not in place in the vicinity of the locality where the soil was collected, forms isolated knolls and partially denuded ridges in the southern parts of the same county, lower down on the above named branch of Salt river.

In the following comparative table *a* is the Woodford county soil, and *b* the Jefferson county soil:

	A.	B.
Organic and volatile matter.....	7.771	7.995
Alumina, oxide of iron and manganese.....	12.961	7.480
Carbonate of lime.....	2.464	0.394
Magnesia.....	173	240
Phosphoric acid.....	319	205
Sulphuric acid.....	150	652
Potash.....	394	260
Soda.....	130	043
Sand and insoluble silicates.....	75.266	83.134
Loss.....	362	226

It will be perceived, from the foregoing comparative analysis, that the acknowledged superiority of the blue limestone soil does not depend, as is usually supposed, on its greater richness in organic matters, since, in fact, it contains 0.225 less of these principles than exist in the Jefferson county soil. This is also proved by comparison with the analysis of Fayette county blue limestone soil, given on page 277 of the first Geological Report; for in that soil the organic and volatile matters are only 0.04 more than in soil *b* of the above table. On the contrary, these comparative analyses, as well as many others which will be hereafter furnished in the succeeding reports, give abundant evidence that it depends on the greater proportion of *inorganic* constituents, viz: the phosphates and alkalies—although these, as may be observed, do not amount, in either soil, to a large *percentage*—together with the much larger quantity of alumina and oxide of iron, which is 5.481 per cent. more in *a* than in *b*. It is now well established that phosphates, sulphates, alkaline earths and alkalies are essential constituents of plants, and must form a part of their food; in fact the cereals cannot come to perfection and form a nutritive grain for man or animals if the soil is destitute, or even very deficient in phosphoric acid; and though we are accustomed to view a soil proportionally rich to the larger or smaller quantity of vegetable mould it contains, yet the presence of the inorganic constituents are as essential and more difficult to restore when once exhausted, inasmuch as they cannot, like the organic, be appropriated out of the atmosphere, but must be renewed either by disintegration of the rocks which contain them, and from which they are originally derived, which must necessarily be a slow and tedious process, or by the labor and expense attendant on the transportation of guano, bone earth, and a few other varieties of manure in which these substances are contained. Indeed some of the earthy fixed constituents of soils, especially the alumina and oxide of iron, i. e. ferruginous clays, are important vehicles, through the intervention of which ammonia is absorbed and fixed out of the atmosphere, and it is mainly from the presence of lime in the soil that nitric acid is produced—a remarkable fertilizer, either from the elements of ammonia, as evolved in the nascent state from decaying animal and vegetable matter, and perhaps, to some extent, directly from the atmosphere during thunder storms.

The quantity of inorganic fertilizers which the Woodford county soil possesses over the Jefferson county soil, in one hundred parts, are therefore:

Alumina and oxide of iron and manganese.....	5.481
Carbonate of lime.....	2.070
Phosphoric acid.....	0.144
Sulphuric acid.....	0.008
Potash.....	0.193
Soda.....	0.067
Total.....	7.863

The total preponderance of these fertilizers in the Woodford soil is, therefore, a little over 1 per cent., and of some of the individual ingredients only a small fraction of one per cent.; this, at first sight, appears small and

insignificant, but when calculated over a single acre of ground, only six inches in depth, the number of pounds becomes very considerable.

Assuming, as found by trial, that the average approximate weight of these air-dried soils, the proper condition used for analysis, to be about sixty pounds to the cubic foot, we obtain the following amounts in pounds, on each acre six inches deep, which the blue limestone soil of Woodford county contains over that in the soil of the eastern part of Jefferson county:

71,625 lbs. of alumina, oxide of iron and manganese;
27,050 lbs. of carbonate of lime;
1,429 lbs. of phosphoric acid;
688 lbs. of sulphuric acid;
2,535 lbs. of potash;
1,136 lbs. of soda.

104,723 lbs. total.

Hence, to make the Jefferson county soil equally productive with the Woodford, for six inches in depth, there requires to be added to each acre of ground:

71,625 lbs. of ferruginous clay;
27,050 lbs. of limestone, or 15,188 lbs. of burnt lime;
3,175 lbs. of bone earth;
2,161 lbs. of gypsum;
4,848 lbs. of unleached ashes;
2,455 lbs. of common salt;

111,214 lbs. total.

In place of the 3,175 pounds of bone earth and 2,161 pounds of gypsum there might be substituted, with advantage, 3,000 pounds of superphosphate of lime; that is bone earth which has been treated with sulphuric acid, by which results an acid phosphate of lime and gypsum, which has been found, in practice, an excellent form of application of the highly important inorganic constituents of soil of soils. Soda and lime are also very advantageously employed in agriculture, by dissolving common salt in as much water as is required to convert the caustic lime into a fine powder, and slaking the lime with this brine.

However, all these ingredients, except the ferruginous clay, can be obtained by the application of farm-yard manure, of which there is always more or less on every farm; but not in the manure as it is usually found, after long exposure to weather, alongside the stable, but in fresh stable and cow house manure, or in manures which have been properly preserved *under cover*, and in such a manner that neither the soluble portions have been drained away in liquid oozings from the manure pile, nor the ammonia volatilized into the atmosphere; in manure, in short, which has been carefully heaped up under shelter, in a slightly inclined plank pen, with tight floor, constructed so that all the liquid part can drain into a tank or cistern, from which it can be pumped over the manure heap from time to time, or carried separately on to the land, while, at the same time, care has been taken to fix the ammonia, which would otherwise escape into the atmosphere, either by the addition of alternate layers of much decayed wood, or other vegetable mould, charcoal powder, or, better than all, so much diluted sulphuric acid as shall prevent any odor being emitted. To such a manure pile the lime slacked with brine is also a good addition, as the sulphate of lime and chloride of calcium thereby formed are excellent absorbers of ammonia.

In the same region of Jefferson county, a soil was collected from a field which had been 25 to 32 years in cultivation; also samples of the immediate subsoil and red under-clay, which almost universally underlies these lands at the depth of a few feet.

The following is the comparative analysis



of the virgin soil of Jefferson b, while a is of the soil from the adjacent field long in cultivation:

In 100 parts.	A.	B.
Organic and volatile matter.....	7.996	4.506
Alumina, oxide of iron and manganese.....	7.480	6.204
Carbonate of lime.....	394	316
Magnesia.....	240	200
Phosphoric acid.....	202	191
Sulphuric acid.....	682	067
Potash.....	200	158
Soda.....	043	070
Sand and insoluble silicates.....	83,137	88,128
Loss.....	0.226	00,160
	100,000	100,000

It appears from the above that there has been carried off from this field, by the succession of crops harvested, assimilation by stock filtering and washing, a part of every fertilizing ingredient except soda, in the following proportions in 100 parts:

Organic and volatile matters.....	3.490
Alumina, oxide of iron and manganese.....	1,240
Carbonate of lime.....	078
Magnesia.....	040
Phosphoric acid.....	014
Sulphuric acid.....	015
Potash.....	042
Total.....	4,919

This, calculated for one acre, six inches deep, gives:

45,607 lbs. of organic and volatile matter;
16,204 lbs. of alumina, oxide of iron and manganese;
1,019 lbs. of carbonate of lime;
522 lbs. of magnesia;
182 lbs. of phosphoric acid;
196 lbs. of sulphuric acid;
548 lbs. of potash.

64,278 lbs. total.

Here then we have the amount in pounds which would be required to be restored to each acre of this field to bring it back to its original fertility, provided the influence of cultivation has only extended to the depth of six inches; but these amounts would require to be doubled if the exhausting influence has extended to one foot.

In Europe, where the different kinds of manure, both organic and inorganic, have a commercial value, the

45,607 lbs. of organic and volatile matter would be worth.....	\$28.50
16,204 lbs. of alumina, oxide of iron and manganese would be worth only what it might cost to restore it, either by means of the subsoil plow or the cost of hauling it on to the land, if beyond the reach of the subsoil plow;	
1,019 lbs. of carbonate of lime, worth.....	63
522 lbs. of magnesia, worth.....	25
182 lbs. of phosphoric acid, worth.....	1.82
196 lbs. of sulphuric acid, worth.....	24
548 lbs. of potash, worth.....	8.22
	\$39.66

The importance of the information conveyed by these results is most manifest.

By far the most expensive part of the above ingredients, if required to be purchased and hauled on the ground, would be the organic constituents; but fortunately there are other economical alternatives of reclaiming the lost humus of a soil. The most abundant proximate principal of humus is vegetable fibre, which, by decay, yields chiefly carbonic acid and the elements of water. It is by supplying these to plants that it is mainly efficacious in agriculture. Fortunately there is an inexhaustible store of these principles in our atmosphere, and the farmer has the power, if he knows how, to appropriate them to his use from that source, without seeking further. Strange as it may at first sound, land can be *manured* from the atmosphere; that is, it can receive from it the fertilizing elements of the organic constituents of manures. But this must be effected through the intervention of the mineral, inorganic or fixed constituents of the soil; that is, those earthy principles which cannot be burnt off by fire, and are, therefore,

found in the ashes of plants—such as the phosphoric and sulphuric acids, lime, clay and alkalis—for, with an abundant supply of these and ammonia, a luxuriant growth of leaves and roots overapread and penetrate the ground, having, during their growth, fixed a very large proportion of their weight and substance out of the atmosphere. It is upon this principle that the improvement of land by green cropping is based, which, when turned in, passes rapidly into a state of decay, furnishing, in this way, an immediately available and abundant supply of carbonic acid, oxygen and hydrogen, in the proportions in which they exist in water; but these substances can moreover be condensed out of the atmosphere by good tillage, for the more porous and loose a soil is the more it is penetrated by air and rainwater, in which more or less carbonic acid is always condensed. Thus, if the farmer takes care that his land is sufficiently supplied with these inorganic constituents above mentioned, and a certain amount of the nitrogenous principles, he need not go to much expense in hauling humus, or its equivalent substances, mainly consisting of woody fibre, as the atmosphere has always a liberal supply on hand. Indeed the nitrogenous principles can also be obtained to a considerable extent from the same source; since there are abundant emanations continually volatilizing ammonia and carbonate of ammonia into the air, which are returned to the earth by every shower of rain or fall of snow, besides what is absorbed by a porous, well tilled soil, particularly if that soil has a notable quantity of clay and peroxide of iron.

Seeing, then, whence the organic and volatile matters of the soil may be derived, the next inquiry which presents itself in connection with the comparative analysis of the soil just given is, can any or all of the removed inorganic constituents be obtained from the subsoil or the under-clay that underlie the soil? Because, if so, this is undoubtedly the most accessible and cheapest source, whence they can be restored to the soil.

The following analyses of the immediate subsoil (a) and the under-clay (b) give the answer to this question:

	A.	B.
Organic and volatile matter.....	2.843	3.112
Alumina, oxide of iron and manganese.....	6.235	17,020
Carbonate of lime.....	356	194
Magnesia.....	226	
Phosphoric acid.....	099	477
Sulphuric acid.....	062	083
Potash.....	182	297
Soda.....	028	111
Sand and insoluble silicates.....	89,900	77,820
Loss.....	049	881
	100,000	100,000

The conclusion from the preceding analysis is that they can be supplied to a *limited* extent by the immediate subsoil; but in much greater abundance by the red, ferruginous under-clay which is found universally a few feet under the soil of this part of Jefferson county. This under-clay is not only rich in alumina and peroxide of iron, uncontaminated with protoxide of iron, earths which have a remarkable power of absorbing ammonia from the atmosphere, and yielding it by degrees to plants, besides retaining other manures and water, but in addition, this red under-clay, it will be observed, contains more than twice as much phosphoric acid, and nearly double the amount of alkalis which are in the virgin soil. How important is this information to the farmer; he learns by these chemical analyses that he need not go to any other source, at present, for his supply of the inorganic food of plants; and either by the aid of

powerful subsoil plow, where this red clay is sufficiently near the surface to be reached by this operation, or where it lies too deep to be thus turned up, he can obtain it by only sinking with his pickaxe and shovel a few feet beneath the surface of his *own* land.

Let those who have hitherto had but little faith in the powers of chemistry to reveal to agriculture invaluable truths contemplate these results.

I have heard farmers, and even those professed to be chemists, express their doubts that this science could ever disclose the mystery of vegetable assimilation, or the way in which plants received their nourishment and that transposition of the elements thereto contributing; but he who has closely watched the rapid stride of discovery in chemistry in the last quarter of a century, cannot fail to have most implicit confidence in this noble science.

Already upwards of one hundred and fifty soils have been collected in Kentucky since the commencement of the Geological Survey of the State. A large proportion of these have been selected in sets of three and four from the same locality, as has been done in Jefferson county, and are now in rapid progress of analysis, many of which will appear in the forthcoming second volume at the close of this season.

I may also state, in this place, that so far as these chemical analyses have yet been carried, they have, in every instance, been able to show not only the difference in composition of the soils from the various formations, but also the precise ingredients removed by cultivation, as well as the proportion of these.

I am not aware that such an extensive comparative investigation of the soils, on the same plan, has ever been undertaken; and I shall be greatly disappointed if there does not result therefrom most important practical results to the land-owners of this commonwealth.

I cannot close this communication without calling the attention of the citizens of Kentucky to facts in reference to the general comparative fertility of their soil that should cause every settler to pause and reflect before he lightly decides to leave his native State and seek a new home further west.

For the sake of comparison, Dr. Peter has made an analysis of an Illinois prairie soil collected by him in October, 1855, opposite Keokuk, a few miles back from the Mississippi river, just from under the newly upturned original prairie sod, which I here submit:

Organic and volatile matters.....	3.050
Alumina.....	2.495
Oxide of iron.....	2.350
Carbonate of lime.....	690
Magnesia.....	526
Phosphoric acid.....	175
Sulphuric acid, not estimated.....	
Potash.....	197
Soda.....	100
Sand and insoluble silicates.....	84,470
	100,163

In communicating the results of this analysis, Dr. Peter remarks, with great justice:

"Notwithstanding the luxuriance of the growth of the first crops on the prairie soil, occasioned partly by the large amount of available nourishing matter afforded by the decay of the thick sod, it is evident, from the above analysis, that, taking into consideration *durability* as well as *immediate fertility*, as ascertained by the chemical analysis of the soil itself, apart from the soil, there are many of our Kentucky soils which take the



second rank when compared with those of the blue grass region which yet are fully equal to this prairie soil.

"Compared with the first rate soils of Kentucky that of the prairies contains a much smaller proportion of alumina and oxide of iron, as well as lime, magnesia, phosphoric acid, alkalies. It contains a much larger proportion of fine sand, and doubtless a larger proportion of the coarser sand, than our best soils; and, therefore, whilst its large quantity of organic matters is held in the soil with a small force of attraction, because of the large proportion which the sand and silica bears to the alumina and oxide of iron; and hence they are readily soluble, and immediately available in the production of luxuriant crops. These very circumstances will cause its most speedy exhaustion; and, when the accumulated store of organic matter has been consumed by thriftless husbandry, this soil cannot rank beyond a second rate position."

By a comparison of the constituents of this Illinois prairie soil with the average soils of Kentucky—for example, with a of the following table, which is an upland soil of Franklin county, waters of Benson, near Hardinsville, and b, a subcarboniferous soil of the Barren limestone formation, Barren county, we perceive that these Kentucky soils are, as a whole, in no way inferior:

	A.	B.
Organic and volatile matter.....	9,133	5,200
Alumina only in B; alumina, including oxide of iron and manganese, in A..	8,100	3,460
Oxide of iron.....		2,266
Carbonate of lime.....	316	366
Carbonate of magnesia in A; magnesia alone in B.....	617	205
Brown oxide of manganese.....		234
Phosphoric acid.....	243	159
Sulphuric acid.....	668	
Potash.....	173	197
Soda.....	149	690
Sand and insoluble silicates.....	80,754	87,686
Loss in A; loss and sulphuric acid in B.	647	197
	100,000	100,000

The Franklin county soil is even rather richer in organic and volatile matter; both are richer in argillaceous matter; the Franklin county soil is considerably richer in phosphoric acid, and the Barren county soil is almost equal to it, and contains the same amount of alkalies.

If we compare the Illinois soil with the best Kentucky soils we find that there would require to be added to the Illinois soil, for each acre, to make it equal in the amount of fertilizers for only six inches in depth:

107,236 lbs. of ferruginous clay;
20,669 lbs. of limestone;
1,181 lbs. of phosphoric acid, or
3,802 lbs. of unleached ashes;
393 lbs. of soda, or
836 lbs. of common salt.

It is true that the Illinois soil contains 1.28 per cent. more organic matter, which would contribute to produce heavy crops for the first few years; but the above inorganic constituents are the true elements of permanent productiveness, and the Illinois soil, with 84.47 per cent. of sand and insoluble silicates, must, of necessity, be far sooner exhausted than the more intensive argillous calcareous soil of the blue grass regions of central Kentucky.

Let not, then, the Kentucky farmer, without due consideration, leave the home of his nativity in the hope of finding in the far west land more productive than his own. Let him rather seek to gain an insight into the qualities of his soil, and adopt a frugal method of husbanding the strength of his new land and renovating the consumed ingredients of his soil.

D. D. OWEN,  
State Geologist.

## CHICAGO, IOWA & NEBRASKA RAILROAD.

The annual meeting of the stockholders in the above road, was held at Clinton on the 26th ult. The attendance was large—many of the eastern stockholders were present, and from their continued interest and spirit, inspired the fullest confidence in the project, and the completion of the road to this city within the shortest time that has ever been promised, i. e. two years from the time of beginning.

One year has passed, and the absolute labor of the enterprise is more than half accomplished. The road is nearly completed to DeWitt—is under contract to Cedar Rapids—is being pushed forward vigorously—all the deep cuts will be finished in a few weeks—a large amount of rolling stock is on the road—iron purchased to construct the road to the Wapsipinican—arrangements made for the purchase of iron to complete it to Cedar Rapids—the company are free from debt, having promptly met every estimate on the day it fell due. This has been done mainly by the eastern stockholders, and now those on this end of the road should come forward, so that no interruption may follow the past prosperity.

The movements of this company are comparatively silent, but the work has never stopped since it was commenced, and to-day upwards of 500 men are at work in the various cuts along the line between this city and DeWitt. It is true they have no grant of land, but, what is far better, they have a sound company with credit unimpaired—a route almost ready made by nature—and energy and determination which are alike strangers to obstacles.

C. I. & N. Railroad, then, is no longer a fable, but a fixed fact. Let our citizens take fresh courage and put forth every effort in their power to meet promptly the promises they have made. This done, in less than ten months the cars will be running to the Valley City.

The official proceedings have not yet reached our city, but we shall most likely have them in time for our next issue.

We append the list of officers elected:

**DIRECTORS**—Charles Walker, of Chicago; L. B. Crocker, Oswego, N. Y.; T. T. Davis, Syracuse, N. Y.; James Purdy, Mansfield, Ohio; A. S. Mitchell, St. Louis, Mo; B. F. Carver, Chicago; J. C. Bucher, C. A. Lombard, Clinton, Iowa; Cyrus Clark, Buffalo, N. Y.; John Weare, H. G. Angle, S. C. Bever, Wm. Greene, Cedar Rapids, Iowa; H. A. Tucker, Chicago; John Bertram, Salem, Mass; H. A. Twombly, Wm. T. Giddon, Boston, Mass.; Austin Myers, Syracuse, N. Y.; S. S. Flourney, J. T. Boyle, Ky.; Geo. W. Amos, DeWitt, Clinton Co., Iowa.

**EXECUTIVE COMMITTEE**—Chas. Walker, James Purdy, *Ex Officio*: T. T. Davis, L. B. Crocker, A. S. Mitchell, C. A. Lombard, John Weare.

**OFFICERS OF THE BOARD**—*President*—Charles Walker; *Vice President*—James Purdy; *Sec'y*—C. B. Rowley; *Treasurer*—C. A. Lombard; *Chief Engineer*—Milo Smith.

The utmost harmony prevailed, and a spirit pervaded all minds to keep the work progressing without interruption.—*Cedar Valley Times Feb. 5th.*

The Sandusky City and Indiana R. R. will pay their March interest at the People's Bank New York.

## CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

### MERCHANTS' EXCHANGE

### AND AT PRIVATE SALE.

BY HEWSON & HOLMES.

For the week ending March 4, 1857.

#### BONDS.

\$7,000 Covington & Lexington R. R. Co.	7 per cent. 2d mort. Bonds.....	67½ and int.
2,000 Covington & Lexington R. R. Co.	6 per cent. 1st mort. Bonds.....	70 "
11,000 Cincinnati & Chicago R. R. Co.	7 per cent. 2d mort. Bonds.....	5 "
4,000 Do. do. do. do.	6½ "	6 "
4,000 Do. do. do. do.	6 "	6 "
2,000 Hillsboro' & Cincinnati R. R. Co.,	7 per cent. 1st Mortgage Bonds....	48 "
5,000 City of Cincinnati 6 per cent. Bonds		89 "
1,000 Columbus & Xenia R. R. Co. 7 per	cent. Dividend Bonds of '60.....	90 "
1,000 Cin., Ham. & Dayton R. R. Co. 7	per cent. 2d mort. Bonds.....	85 "
1,500 Marietta & Cincinnati R. R. Co. 7	per cent. Domestic Bonds.....	75 "
700 Ohio & Mississippi R. R. Co. Scrip.		27½ "
515 Little Miami R. R. Co. Scrip. of	Dec., 1856.....	80 "

#### STOCKS.

345 Shares Ohio & Miss.....	9 and int.
400 " Cin. & Chicago.....	2¾ "
100 " Peru & Indianapolis.....	9 "
20 " Cin., Ham. & Dayton.....	70 "
76 " Indianap. & Cio.....	64½ "
100 " do do.....	64½ "
148 " do do.....	63 "
69 " do do.....	64 "
50 " Little Miami.....	90½ "
27 " do do.....	90½ "
40 " Columbus & Xenia.....	90½ "
33 " Cov. & Lexington.....	20 "
180 " Junction (Ind).....	8¾ "
62 " Marietta & Cincinnati.....	17 "
10 " Ohio Life and Trust Co.	
Bank.....	98 "

### MONETARY AND COMMERCIAL.

Since our last, we have to report a decidedly stringent money market. The opening of the business season has created an active demand for money, which the regular houses have not been fully able to meet. The payments of the 1st inst. were large, but we are pleased to add that they were met promptly. This shows a healthy state of affairs. We quote rates of discount for prime paper at 10 to 12 per cent.

Eastern Exchange has remained firm at ½ to ¾ premium, with an active market.

The reports from the East are of a satisfactory nature. The bank reports show favorably, compared with those of the previous week.

Stocks are more active. Hewson & Holmes, Stock Brokers of this city, in their weekly circular, say:

In the face of a very severe pressure for money, prices of Stocks have in the main been well sustained in the past week—a very active demand having existed for investment. The only weakness exhibited was in Indianapolis and Cincinnati, which sold at a decline of 2 per cent., rallying subsequently with an improvement of 1 per cent., and closing firm at 64.

In Hamilton & Dayton shares we quote one small sale at 70c.

In Little Miami & Columbus & Xenia, an active demand has existed and prices close with an improvement of ½ per cent.

The earnings of this line for February come in very favorably, showing an increase of 23 per cent. over February of 1856.

Earnings of the Little Miami & Columbus & Xenia R. R. for Feb. '57.....	\$75,504 65
February '56.....	61,115 83

Increase, .....\$14,388 62

In dead Stocks a very fair business has been done—Ohio & Miss. shares having sold at 9, at which price the market is quiet, with but little disposition to buy at this price.



In Bonds we report sales of Covington and Lexington 7 per cent. 2d mortgages at 67½, and 6 per cent. 6's, the 1st mortgage, at 70 and int. Hamilton & Dayton 2d mortgages 7's, at 85.—Columbus & Xenia 7 per cent. dividend bonds of 60 at 90, and Cincinnati 6's at 89.

The money market has most been uncomfortably stringent, and much difficulty has been experienced in placing good paper. A rapid improvement is expected in the early opening of the Spring trade, and in large returns for produce which is now going into consumption at high rates.

Exchange on New York is without change. The rates of last week have been well sustained, with a fair demand. We therefore continue to quote at ½ to ¾ prem.

In New Orleans exchange we note a decline of ¼, with sales at ½ to 1 per cent. with a less active demand.

#### NEW YORK STOCK SALES, March. 2, 1857.

\$1,000 Mississippi State 6's.....	84¾
1,000 Virginia 6's.....	91¾
15,000 Ill. Cent. R. R. Bonds.....	100
2,000 Terre Haute and Alton 2d mort. Bonds....	69
16,000 Lake Erie W. 2d Mortgage.....	42
5,000 C. & P. Div. Bonds.....	62
1,000 Erie Railroad Bonds, 1875.....	94
100 Shares N. Y. Central R. R.....	89¾
100 " Milwaukee & La Crosse.....	71
30 " Mil. & Miss.....	69
100 " Cleveland & Toledo.....	75
200 " Chicago & Rock Island R. R.....	105
175 " Wis. & L. S. RR.....	60
28 " New Jersey R. R.....	121½
600 " Erie R. R. stock.....	57½
5 " Hudson River.....	27½
30 " Mich. Cent.....	95¾
120 " Reading.....	81½
75 " Mich. So. & No. Ind.....	75
350 " Illinois Central R. R.....	137
15 " Gatena & Chicago.....	103¾

MACON & WESTERN R. R.—The report of the Superintendent of the Macon & Western Railroad has the following statement of the year's business ending Nov. 30, 1856:

The gross income for freight, mails, passengers and interest on money loaned, amounting to.....	\$349,907 71
Expenses.....	205,008 60
Net.....	\$144,899 11
Add balance from last report.....	109,987 27
Amount received on new stock.....	745 35
Suspense account, loan sold.....	517 15

\$236,148 88

Out of this has been paid dividends	
No. 19 and 20.....	\$135,416 60
Interest on bonds.....	9,555 00
State and city taxes.....	2,790 55
Paid from this fund and charged to construction account.....	52,957 99

200,719 54

Balance in hand.....\$55,429 34

## RAILROAD RECORD,

BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON.

no13 10 Wall st., near Broadway, New York.

## RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.] I. H. GOODMAN & CO., NO. 7 WALL ST., N.

General Map Establishment,

No. 3 College Hall, Walnut St., Cincinnati

## CONSULTING ENGINEER.

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE, Consulting Engineer, 118 Park st., Baltimore.

je4

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st., NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush,

Printed & Unent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars;

ROPE MATTING, Every Width;

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRASS FILLING.

N. B. We have the Plush in bond for exportation. sepl8 DOREMUS & NIXON.

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.). 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY, President of the Board. aug14-1y

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

feb19-1m VOSE, LIVINGSTON & CO., 9 South William street, N. Y.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 55 lbs per lineal yard, now on the way from Great Britain; for sale by

VOSE, LIVINGSTON & CO., 9 South William street, N. Y. July31

## THOMAS D. STETSON, Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,

No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc22

## To Railroad Contractors.

McMINNVILLE, Tenn., Jan. 18, 1857.

SEALED PROPOSALS will be received at McMinnville until March 10th, 1857, for the grading, masonry and bridging on sixty miles of the South Western Railroad, commencing at McMinnville, the southern terminus, and running north through Warren, White and Putnam counties, to Livingston, in Overton.

The character of the work is heavy, comprising a large amount of rock excavation, several heavy jobs of bridge masonry, and 1200 lineal feet of Howe's or MacCallum's bridging.

Proposals for the above work may be made by sections of one mile each; or for thirty, or the whole sixty miles, including iron, track-laying, depot buildings, and all the equipment necessary for operating the road when complete.

Plans, maps, profiles and specifications may be seen, and all other information obtained, at the Engineer's Office, after March 1st, at McMinnville; or before that time, by addressing me, at the Engineer's Office of the M. & O. R. R., Jackson, Tenn.

ROBERT STERLING.

feb12 Engineer in Charge.

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

## RAILWAY AGENTS

AND

## COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

## RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard; 500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

feb5 tf THEODORE DEHON, 10 Wall st., near Broadway, New York.

## SAFETY & ECONOMY.

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point for which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

dec11 JAMES HARRISON, Jr., Second avenue, corner of 22d street, N. Y.

## T. F. RANDOLPH & BRO.

Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,

CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR

RAILROADS, STEAMBOATS,

AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

dec. 11 GRAY, HEMMINGRAY & BROTHERS, No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

jan8 1y MIDDLETON, WALLACE & CO., 119 Walnut st., Odd Fellows' Building



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12:30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6:30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton.

THE Steamer leaves Racine for Chicago every evening at 10:30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Ass't Sup't. aug 14

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



### Manufacturers of all kinds of Railroad MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## WASON'S CAR MANUFACTORY, Near the Pittsburgh R. R. Shops, CLEVELAND, OHIO.

Passenger, Baggage, Freight, Dumpers,  
Hand Cars, &c.,

Of the best quality in all respects, style, workmanship, and material, made to order with promptness. Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

CHARLES WASON,

Late of the firm of T. & E. Wason, Springfield,  
Massachusetts. feb 20

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrels, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
feb 7 LEE & LEAVITT.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via, Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [jan 1-y] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

### Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps.

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Mittler's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanthorns.

Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS.

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,

Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED. oc23-1y

## E. MENDENHALL, MAP, BOOK & PRINT SELLER,

Has constantly on hand  
GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND  
OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,  
Geological and Astronomical Charts, Globes,  
MICROSCOPES, TELESCOPES  
DRAWING INSTRUMENTS, &c.

Publisher of the

### Railway Map of the Western States,

In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO  
the LARGE MAPS OF CINCINNATI and HAMILTON CO.  
Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

MAPS OF EVERY DESCRIPTION.  
mh22

## Important to Railroad Companies, etc.



### Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

### RAILROAD FROG-POINTS,

### Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also, be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

### ENGINEERING!!

The undersigned is prepared to furnish  
SPECIFICATIONS, ESTIMATES, AND PLANS,  
in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c  
Particular attention given to the superintending of  
LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,  
While under construction.

AGENT FOR THE PURCHASE of, on commission  
all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOY'S  
METALLIC SELF-ADJUSTING CONICAL PACKING,  
DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles  
CHAS. W. COPELAND,

Consulting Engineer,

N. Y. 64 Broadway, N. Y.

## W. G. ATKINSON, Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

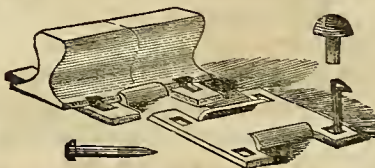
RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological lens prepared. mar 1-y

### GREAT WESTERN

### Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

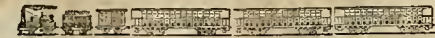
Please direct name in full.

feb 28

CORBY, GOSSIN & CO.



## Most Direct Route to the East.



## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
jn10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

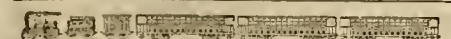
## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mu.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK, Sup't Terre Haute & Richmond R. R.



## New England Car Spring Company

47 LA SALLE ST., CHICAGO, ILL.

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducting. Sold at wholesale at great discount from list prices.

ec23-2m CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Philadelphia in.....	14 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via, Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via, Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus. One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

3y17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**Freight.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Onbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Onbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L.

Office No. 2 Burnet House.

Jan. 2.

1856.

1856. Winter Arrangement. 1855

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST.

## FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Springfield for Columbus; at Urbana with Columbus and Piqua trains East and West; at Bellefontaine for Crestline, Pittsburgh, Philada.; at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities.

Same train connects at Dayton for Dayton & Michigan Road to Troy, Piqua, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Cunnersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 5:40 A. M., and Chicago 2:00 P. M. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M. For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

HENRY O. AMES, Sup't.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East, arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M., for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash, and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Latayette.

Passengers coming South from T. V. & W. R. R., make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Fr'ght. Ag't.

Indianapolis, Sept. 16, 1856.

[mh29-1y.



## KENTUCKY LOCOMOTIVE WORKS

CORNER OF KENTUCKY AND TENTH STS.  
LOUISVILLE, KY.

THE Proprietors of the Kentucky Locomotive Works would respectfully inform Railroad Companies and the public generally that, having completed their establishment, they are now prepared to receive and execute orders with fidelity and dispatch.

They will contract for

**Locomotives, Passenger, Baggage, Freight, Gravel and Hand Cars,**

Of every style and pattern, as well as all kinds of Stock and Machinery required for railroads.

Particular attention will be paid to repairing, for which they have every facility.

They are also prepared to contract on favorable terms for building all kinds of Machine Tools, such as Turning Engines, Lathes, Planers, Drills, Slotting, Splitting, and Shaping Machines, of every variety of pattern.

Having also a large FOUNDRY connected with the establishment, orders for Castings are solicited, and will be filled with promptness.

Car Wheels of any pattern can be furnished on short notice. Double and single plate and Spoke Wheels of all sizes constantly on hand.

Communications or orders must be addressed to  
OLMSTED, TENNIS & PECK,  
Louisville, Ky.

## Norris' Locomotive Works

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS & SON



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

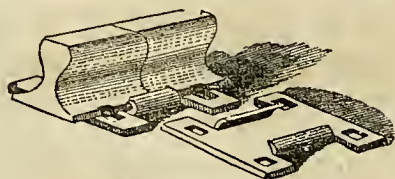
### DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Linch Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

### RAILROAD SPIKES.



WROUGHT IRON

## Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch.

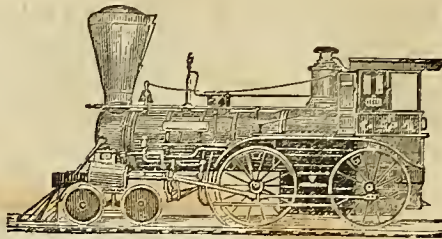
J. HOPKINSON SMITH,

No. 25, South Charles st.

Please direct the name in full.

Baltimore August 31-7

## LOCOMOTIVE WORKS.



**NILES & CO.,**

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855 6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.

New York, Ap 3, 1856. 9 South William Street.

## A. B. LATTI'S

### Patent Mercurial Steam Gauge.

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

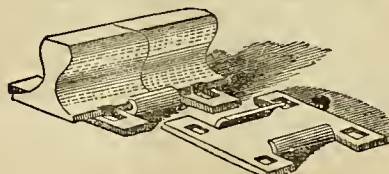
We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

J. D. GREEN,

A. B. & E. LATTI.

C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

**J. B. GREEN & BRO. PROPRIETORS,**

WE have in use improved machinery, capable of turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

J. B. GREEN & BRO.

Feb. 14 ly.

## THE SCHENCK MACHINERY DEPOT

AND

### Leather Banding Manufactory,

No. 163 GREENWICH STREET,

NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Up-right Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

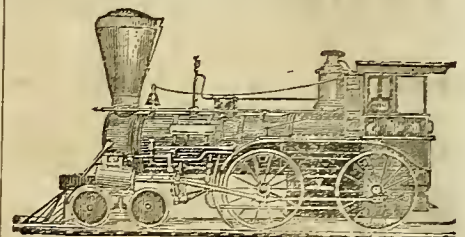
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



THE undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaw Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car, Hand, and Signal Lanterns.

**Cotton Duck for Car Covering,**  
Of any required width to 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver Plated Trim mings for Windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other Articles pertaining to Cars.

ALBERT BRIDGES,

Lata Davenport & Bridges, Car Manufacturers.

Cambridgeport, Mass.

ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass

toct

## GEO. D. WINCHELL & BRO.,

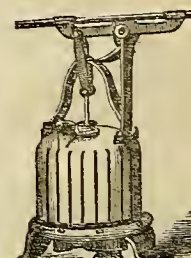
172 Elm Street, between 4th & 5th,

CINCINNATI, O.,

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturers, Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, &c. all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

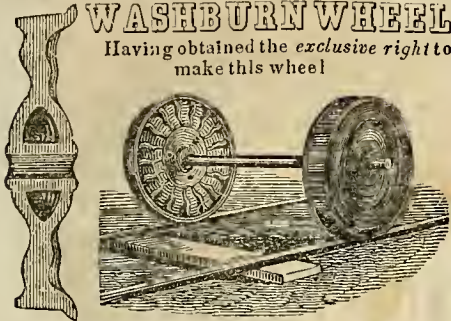
SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute.

June 18, 1855 1



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL.

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

## Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16\* **JOSEPH DAVENPORT.**

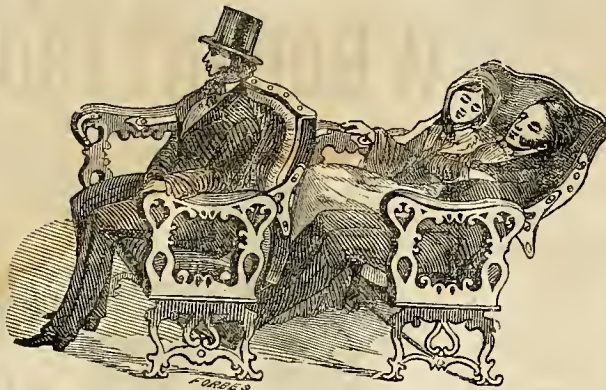
### S. C. THOMSON & CO.

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Car Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

**ALBERT M. LEA,**  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES

NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

## IRON BOILER FLUES PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

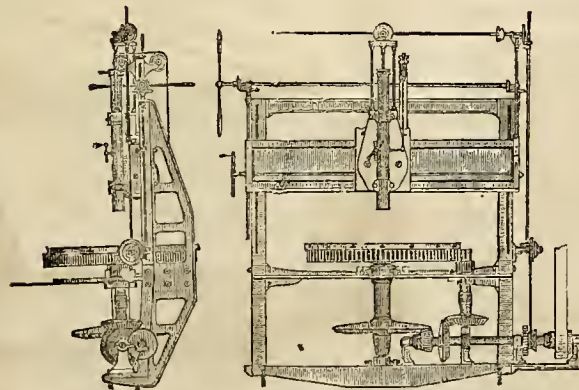
**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

**Warehouse, 85 South Third St., PHILADELPHIA.**

## NILES' WORKS.

## FOUNDERS AND MACHINISTS,

EAST FRONT STREET, CINCINNATI,



## TYRE LATHES,

Of the most approved plan.

### HORIZONTAL

## FACE PLATE LATHES,

OF VARIOUS SIZES, TO SWING  
From 40 inches, to 12 feet.

## PLANING MACHINES

LARGE & SMALL.

## MARINE & STATIONARY ENGINES.

BOILERS OF EVERY DESCRIPTION.

## HEAVY FORGINGS,

IRON AND BRASS CASTINGS, &c., &c.



## Parry's Anti-Friction Box,

PATENTED IN 1853.

THE attention of the public is directed to this invention, for which patents have been granted by the United States, England, France and Belgium—it is designed to relieve all species of pivot or end friction, and is especially adapted to receiving the thrust of propeller shafts, pivots for railway turn tables, steps for turbine wheels, mill stones, center plates for eight wheel cars, steps for heavy mill shafting, and for all kinds of presses where the power is received by the application of a screw, the gain of power by the adoption of this box is immense.

Contracts will be taken for erecting Railway Turn-Tables, (which will cost no more than a wooden structure), and their durability will be guaranteed for twenty years without repairs.

Applications will be received for the sale of State Rights for the use of this invention.

For further information, apply to

JOHN RICE & CO., Patentees.

90 South Fourth street, Philadelphia.

READ THE FOLLOWING CERTIFICATES.

OFFICE OF THE PENNSYLVANIA CENTRAL R. R.,  
PHILADELPHIA, June 9th, 1855.

MR. PARRY—

DEAR SIR:—We have your Anti-Friction Pivot in use under Turning Tables, on this Road. They require no gearing or machinery, but simply the strength of one person to turn them when loaded with engine and tender. I should judge they will last for years without repair—an important item in such structures.

Yours respectfully, J. EDGAR THOMPSON,  
Civil Engineer and President.

I fully concur in the above and foregoing statement, having examined the Turn-Table and witnessed its operation

WILLIAM B. FOSTER, JR.,  
Civil Engineer

SUPERINTENDENT'S OFFICE,

TRANSPORTATION DEPARTMENT, PENN'A R. R.,  
ALTOONA, Blair Co., Pa., Nov. 11, 1854.

MR. PARRY—

DEAR SIR:—The Turn-Table in the new engine house at Altoona is constructed of boiler plate, and is fifty feet in diameter. The center bearing is an application of your Improved Anti-Friction Box, and thus far has given evidence that it is all that its proprietor claims for it—the very best center bearing that can be found on that purpose.

Very respectfully,

H. J. LOMBAERT, Superintendent.

ENGINEER DEPARTMENT, NORTH PA. R. R.,  
PHILADELPHIA, Feb. 10, 1855.

I am so well satisfied of the excellency of Parry's Anti-Friction box, that I have purchased for the North Pennsylvania Railroad Company the right to use it, and Messrs. Bancroft & Sellers are now building two locomotive engine turn-tables of cast iron for me, one of twenty-five feet, and one of forty seven and a half feet diameter, to which these boxes are to be applied. I have no doubt whatever that the invention is a very valuable one, and it is simple and not liable to get out of order.

EDWARD MILLER, Chief Engineer.

READING, June 2, 1853.

There are two sets of the above rollers in use on the Philadelphia and Reading Railroad; one under a heavy twenty-five foot iron turning platform, for large locomotive engines, and the other under a six ton crane.

Both have been in operation for some time, and have proved satisfactory; moving with less friction than any other plan of bearing which I have seen, and requiring no repairs and very little grease or oil.

I consider them a most useful inventions; as greatly decreasing friction on all heavy bearings for either vertical or horizontal shafting machinery.

Signed, G. A. NICHOLS,

Engineer and Superintendent Philadelphia and Reading Railroad.

BORDENTOWN, N. J., Nov. 22, 1854.

In July, 1853, I attached Parry's Anti-Friction Box to the shafts of steam propeller Amboy; it receives the back and forward thrust of the wheels, each eleven feet in diameter. I am convinced, by thorough practice, that it is the best thrust bearing that can be used; it does not heat or corrode, requires very little oil, and I think a decided gain in power or usefulness, over any rubbing surface that may be sufficient to resist the ressure of the forward thrust of a propeller shaft.

ROBERT ALLEN,

Superintendent of Steamboats for Camden and Amboy Railroad Company.

PHILADELPHIA, February 19, 1855.

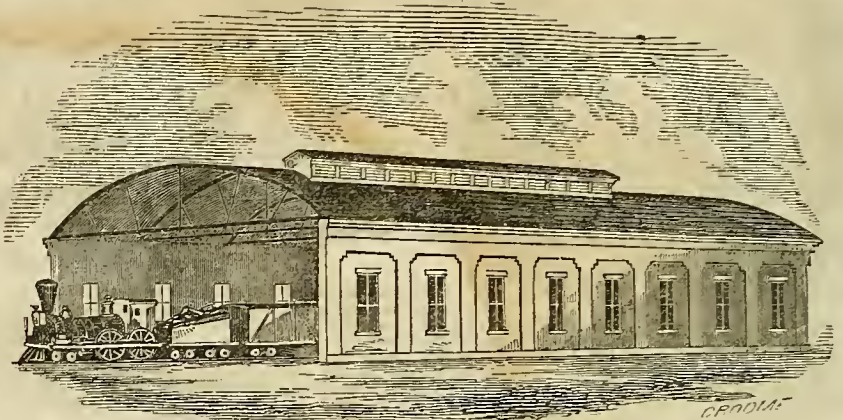
Geo. T. PARRY, Esq.—Dear Sir:—I have examined your Anti-Friction Box for its application more particularly to the purpose of turn table pivots, as well as steps for upright shafts, and difficult as it is to demonstrate as to the perfection of its working, I find its practical applications to be nearer to what has been long desired and sought than anything heretofore offered for such purposes. Great difficulty has ever existed with turn-tables in obtaining a pivot that would give freedom of motion without constant attention and adjustment, and even with the most approved, expensive gearing has been rendered necessary.

The table twenty-four feet in diameter, made by Bancroft & Sellers, of this city, being balanced on its center, I found it required my entire weight on the extremity of one of its arms to destroy its equipoise, while with the power of my little finger I could turn it horizontally upon your box. I therefore take pleasure in recommending its use, as the most perfect pivot and step that has ever been presented to the public.

Very respectfully,

STRICKLAND KNEASS, Civil Engineer.

# Moseley's TUBULAR WROUGHT IRON ARCH ROOFS.



Office, No. 57 West Third Street,  
CINCINNATI, OHIO.

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of Iron Supporting now in use, and no more than good wooden Trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

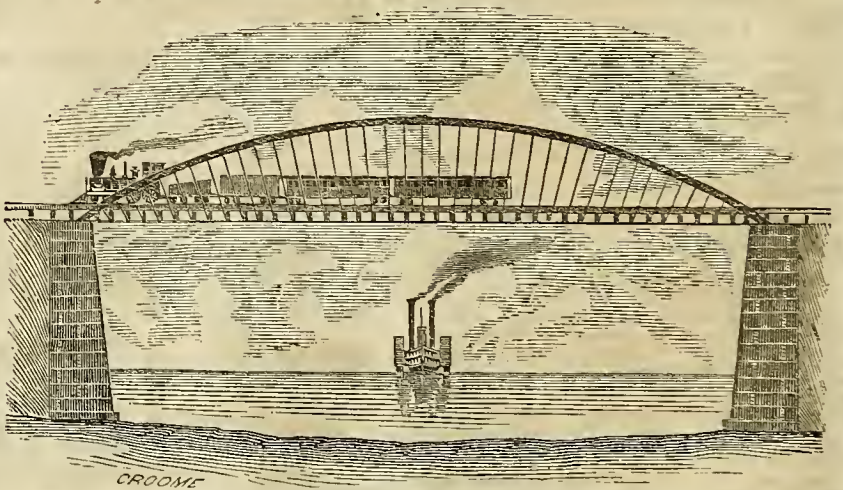
THOS. W. H. MOSELEY, Supt. and Engineer.

MOSELEY, WINSTON & MOSELEY.

January 1st, 1856.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *cast iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great), and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by *responsible obligations*.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

THOS. W. H. MOSELEY,  
Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - Editor.  
W. WRIGHTSON, Associate Editor.

CINCINNATI:

THURSDAY MORNING,..... MARCH 12, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
BY WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

ADVERTISEMENTS—	
One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers, and Proprietors,

### CONTENTS.—NO. 3.

#### EDITORIAL.

Cincinnati & Mackinac R. R. ....	33
The Mail Transportation—Railroad Service. ....	25
Sonora Mining and Exploring Co. ....	35
New York & Erie R. R. ....	36

#### RAILROAD DAGUERREOTYPES.

Georgia Railroad and Banking Co. ....	36
Knoxville & Kentucky R. R. ....	36
Essex R. R. ....	37
Salem & Lowell R. R. ....	37
Rutland & Washington R. R. ....	37

#### RAILROADS.

Little Miami R. R. ....	38
Grand Rapids and Northern R. R. ....	39

#### MISCELLANEOUS.

A Bill Disposing of Certain Grants of Land made to the State of Michigan for Railroad Purposes, by Act of Congress. ....	40
Legal Decisions. ....	41
Union Canal, Pa. ....	41

#### MONEY AND STOCKS.

Table of Stocks and Bonds. ....	42
Cincinnati Stock Sales. ....	43
Monetary and Commercial. ....	43

WESTERN R. R. OF NORTH CAROLINA.—A correspondent of the Charleston Mercury gives the following account of this Company.

The Western Railroad Company was chartered for the purpose of building a Railroad from Fayetteville to the Coal Field on Deep River, with the right, by the 22d section of the Act of Incorporation, “to construct branches to the same, or to connect with any other Railroad that may be constructed.” Under this clause the road can be extended from Fayetteville to the Wilmington and Manchester road at the State line; and the Northeastern road can be made to terminate, either by its main stem or a branch, at the same point; or the Wilmington and Manchester road can be used from the State line to the point where the Northeastern road is intended to strike the same, which is understood to be Florence.

Under the 22d section of the charter, the “Western Railroad” can likewise be continued to and connected with the North Carolina Railroad at any point which runs almost the entire length of the State, and the City of Charleston will thus have access to the entire productions of the State. Ten miles of the forty between Fayetteville and the Coal Fields is ready for the iron, and every means possible is being used to complete the work.

VOL. 5.—No. 3.

### CINCINNATI & MACKINAW R. R.

This great project of internal commerce is much nearer a practical realization than many of our readers anticipate. And it is likely to be carried out in a much more full and thorough manner than we ourselves had ventured to believe. In another part of our paper will be found a bill recently passed by the Michigan Legislature for disposing of the lands donated to this State by Congress to aid in its great railroad enterprises. An examination of its provisions will show that it provides for two great north and south lines, each of about three hundred miles in length, both centering together at or near Traverse Bay; or rather, as nature has made it, at Mackinac, the natural ferry to cross the Straits. The one of these lines called the Amboy, Lansing & Traverse Bay R. R. traverses the central counties of the State, through the great lumber and coal regions of Michigan, and has its southern terminus at Amboy, in Hillsdale county; thence south to Cincinnati. It takes in its course Owosso, Lansing and Hillsdale, and will form a very important local as well as through road. The other, commencing at the same natural northern terminus, runs through the western counties, touching at Grand Rapids and Kalamazoo; from thence southeasterly through Fort Wayne, in Indiana, and through the western tier of counties in Ohio to Cincinnati; or southwesterly through Indianato New Albany and Louisville. Such are the general features of the two roads chosen by the Legislature of Michigan as the recipients of Congressional bounty, in the shape of land grants of upwards of a million acres to each. The two great ideas connected with this munificent grant are: first, the means which they afford for the construction of great arterial lines of internal communication; and second, the natural resources of these lines to create for themselves a lucrative and profitable business.

FIRST—The means they afford for the construction of great arterial lines of railroad. The grants to those railroads will give an average of about six sections of land to the mile of railroad constructed. This is the quantity granted by Congress to the Illinois Central Railroad, and which alone has carried that road to a successful termination, and the highest point of public confidence. It has developed Illinois as no other measure could have done, and vastly increased its resources. Such will also be the effect of these grants on Michigan. They will afford an ample basis for the construction of the roads. The grant to each company may be set down, in round numbers, at 1,000,000 acres of fertile lands, comprising the best pine, cedar and oak lumbering district in the United States. The value of the lands and the cost of the roads may be briefly stated as follows:

Value of 1,000,000 acres of land at an average of \$10 per acre .....	\$10,000,000
Cost of 700 miles of railroad at an average of \$20,000 per mile .....	9,000,000
Surplus for rolling stock and permanent stations .....	\$1,000,000

In the above we estimate that the average value of the lands is ten dollars per acre. This is less than the recent averages of the Illinois Central lands, and may, therefore, be considered a moderate estimate. But, assuming that the lands will only net one-half that amount, there would still be realized from them a sum at least equal to more than one-half the highest sum that the roads, built with ordinary economy, could, under any possibility, cost; for the country through which they pass is one peculiarly suited, in surface, to the cheap construction of railroads. We say, then, that these land grants form an ample basis for the construction of the railroads they are intended to aid.

SECOND—The resources of these lines to create for themselves a lucrative and profitable business. These lines, when they are completed, and the system of which they form the natural northern terminus shall have been perfected, will form the great central arterial lines of commerce in our Union. With one foot resting on the gulf, at Pensacola and Mobile, and on the Atlantic, at Charleston and Savannah, and the other on the great lakes, at Mackinaw Straits—the natural ferrying ground between the States south and those north of our great inland seas—and striking the great central basin, and the richest agricultural portion of our country (the Ohio valley) at its central mart, Cincinnati, as through lines they will combine all the elements of strength; they will be the channels of an internal commerce between regions of different products, which will yield them an ample reward, and will develop and enrich the regions which pay them their tribute. The sugar, cotton, and fruits of the south will meet the cereals, lumber and manufactures of the north midway on the line. Every inhabitant on this great artery of commerce will have it in his power to procure within two days every natural product necessary to his subsistence fresh from the hand of the husbandman, in its native climate. The pleasure travel of the south will find a congenial spot on the great lakes; and the summer resorts of the wealthy will be diverted from the east to the north, and will bring a business affording a large income. Such being the fact, we deem it demonstrated, at least, that as *through lines* these roads will possess unusual elements of strength; and as local projects they have advantages which must create a profitable business. It is true that Northern Michigan is even now comparatively unsettled; but this is rather owing to the fact that good roads did not exist there than to any intrinsic disadvantage in the soil and climate. This fact is admirably illustrated by





Ferris in his "States and Territories of the Great West." At page 180 he says: "Michigan would seem to have been made a mere roadway for the States beyond it. Population, therefore, has not reached far above these principal routes, for it has been easier to go to Iowa than to the central parts of Michigan." This State is rich in natural resources. Its soil is of the best character, capable of producing to advantage all the cereals; its lands are now densely covered with pine, oak and cedar, forming a basis for a lumbering business, in itself of great importance. These same lands are underlaid with beds of the finest bituminous coal; while the northern peninsula abounds in copper and iron. The coal and wood of one side is necessary to the iron and copper of the other, and thus a brisk trade must spring up, and that again will center at its natural nucleus, the Straits of Mackinaw, and lay the basis for a great manufacturing and commercial city.

With advantages such as these for an extensive through and local business, with the means already provided for the building of their railroads, there can be but little doubt that the project of the Cincinnati & Mackinaw Railroad is near its practical and profitable realization.

But there is a point of interest connected with this project that deserves a more particular mention, and that is the final terminus of this great line of railroad. It is conceded that the terminus of every great artery of trade must form an important point. New York, Boston, Philadelphia, Baltimore, New Orleans, and indeed every other great city in our country is evidence of this fact. They were the natural centers of trade for the country that surrounded them; thither the avenues of trade pointed, and thither population and business centered. They became the important points for the country that surrounded them, and grew with its growth. That this process is

not yet complete, Chicago and San Francisco are wonderful examples.

When nature has made a center of trade and where great avenues of trade must naturally terminate there, as the country about it settles must inevitably be formed an important commercial point, a place for the great cities of the future, only limited by the limits which govern the growth of our country and its national prosperity. These great points too, are generally indicated in our country by the early military defences. The forts that were necessary for the safety of the early settlers, the points to which they could most readily fly in cases of danger, have generally formed the beginning of our commercial marts, New York, Cincinnati, Buffalo, Pittsburgh, and others, are striking proofs of this fact. The development of a few years will show that old Fort Mackinaw will be to Northern Michigan, just what each of these cities has necessarily become to the country that surrounded it—the point of easiest access, and the important commercial centre, having three ample harbors. Here, as the northern mines and coal fields are opened, as these resources and the agricultural value of the surrounding country is developed, will be the point where will spring up a large and important manufacturing and commercial city. As the center of one of the richest mining regions in the world, as the northern terminus of one of the longest lines of railroad in our country, and the practical western termination of the great system of Canadian railroads now aiming at this crowning ground, as the natural harbor for a lake region whose commerce is already greatly increasing. Mackinaw possesses elements of growth and prosperity which cannot fail to give it importance, an importance probably not behind the fifth lake city in the next twenty years.

That these views of the commercial importance of this point are sustained by others whose opportunities for information are of the best character, we shall show by the following quotation from "Ferris's States and Territories of the Great West." On page 183, he says: "If one were to point out on the map of North America, a site for a great central city in the lake region, it would be in the immediate vicinity of the Straits Mackinaw. A city so located would have the control of the mineral trade, the fisheries, the furs, and the lumber of the entire north. It might become the metropolis of a great commercial empire. It would be the Venice of the lakes."

It has been considered by the Jesuits, the shrewd forerunners of Catholic civilization, for the past two hundred years, as the great point of importance at the north.

Such are our views of the future of this great line of railroad now rendered certain by Congressional Bounty, and of Mackinaw



its northern terminus, and we are pleased to add, that the control of this important point is just where it should be in Cincinnati, the commercial center of that great line of railroads which shall give it its importance. The business of that section is now done at Mackinaw Island, which has a population of about one thousand inhabitants, and an annual trade of near half a million dollars. The effect of the railroads to be built, will be to transfer at once the whole of this trade to the main land, where there are three excellent harbors and safe anchorage. Congress has already provided for the construction of a light-house at Mackinaw city during the coming year.

#### THE MAIL TRANSPORTATION—RAILROAD SERVICE.

The movement of the Post Office Department, in regard to the employment of railroads, has become quite an interesting branch of the public service. We have before us the last Annual Report of the Postmaster General, for the year ending June 30, 1856, and from it gather the following facts:

1. The following are the *length of routes* (not the number of miles traveled) for each kind of service:

	Miles.
By railroad.....	20,375
By steamboat.....	23,550
By coach.....	50,453
Mode not specified (supposed chiefly on horse-back).....	153,915

Aggregate routes.....239,642

It will be observed that four-fifths of all the railroads are employed in the mail service. The length of route, however, does not express the relative amount of service performed. This will be seen by the following amount of actual transportation performed:

	Miles.
Total annual transportation by railroad.....	21,811,804
Do. by coach.....	19,114,991
Do. by steamboat.....	4,511,154
Do. by other modes.....	26,143,149

Aggregate transportation.....71,581,389

The largest amounts of railroad service performed in the several States were as follows, viz:

In New York.....	3,543,920
In Illinois.....	2,451,320
In Ohio.....	2,294,434
In Massachusetts.....	1,562,392
In Pennsylvania.....	1,152,450

These five States have more railroad transportation than all the residue of the Union.

By dividing the aggregate amounts of annual transportation by the length of the routes, we find that *each mile* of railroad performs more than a *thousand miles* of mail service; that to each mile of steamboat route there are *two hundred miles* of mail service; and to each mile of coach route *four hundred miles* of mail service. The positive superiority of the railroad for mail service is thus demonstrated by the quantity of work done, if there were no other mode.

2. The relative *cost* of these modes of transportation is as follows:

Cost of mail on railroads.....	\$2,451,472
Do. on steamboats.....	1,338,837
Do. on coaches.....	1,329,356

The cost of steamboat service is 29 cents per mile actually carried; of railroads 11 cents per mile; and of coaches 7 cents per mile. If we look to the relative velocity and convenience of these modes, the railroad transportation is far the cheapest. The cost of a mile of railroad route is about \$120.

3. RAILROAD PROFITS.—It will be seen above that the government pays the railroads about *two and a half millions* of dollars per annum; and, considering that this costs very little labor, and that mail-bags only occupy a portion of the baggage car, it must be regarded as almost altogether profit, and a very pretty little sum to receive.

4. The increase of railroad mail service has been very rapid, and corresponds with the increase of railroads. The length of railroad routes, at different dates, was as follows:

1st of July, 1842.....	3,091 miles.
1st of July, 1852.....	10,146 "
1st of July, 1856.....	20,375 "

From the 1st of July, 1842, to the 1st of July, 1852, the annual increase was 700 miles, or 13 per cent. per annum. From the 1st of July, 1852, to the same date in 1856, it was 2,500 miles, or 25 per cent. per annum. The addition last year was 2,000 miles.

In the general account of cost of mail transportation, there is one item which deserves remark: The Panama Company was paid, in the year ending June, 1856, \$141,000 for transporting the mail over a route 48 miles long, and once in two weeks! At this rate, the government would have to pay *five millions per annum* for a mail once in two weeks over the Pacific Railroad! If the government would pay this for a *daily* mail it would secure the road—and why not? But even one-third that sum offered for a Pacific Road would probably cause its construction. The government of the United States, in reference to public works, seems destined to be continually blundering. No encouragement should be given to the Panama Railroad, and the construction of the Pacific should be undertaken without delay.

The country has become now so extensive, and the increase of population on the Pacific so rapid, that a railroad mail route to the Pacific is a matter of necessity.

In reference to the military roads, which are already began, and for which Congress has just made a more ample provision, we find the following paragraph in the Secretary of War's Report:

"The military roads in the various Territories, provided for by acts of Congress, have been steadily progressing; some are now completed, and work on them terminated; others are under contract, or in charge of officers, and will be prosecuted as the means placed at the disposal of the department will admit. Experience, thus far obtained, has demonstrated that in all cases, except where the location is in a prairie country, the ap-

propriations will prove inadequate to complete the roads in a substantial manner.

"This remark especially applies to the Territories of Washington, Oregon and Minnesota. It is readily accounted for in the first two by the rugged mountains, deep and rapid streams, and the unusually heavy forest found throughout that region; in the last, on account of the great length of the roads, the heavy forest, and the number of streams to be bridged. For their completion on the scale originally contemplated additional means will be required."

These appropriations have just been made by Congress, and those practicable military wagon roads will be undoubtedly made.

In reference to the construction of the Pacific Railroad several favorable circumstances have occurred. The new President (Mr. Buchanan) has recommended it in his message, and found constitutional authority for it. The examinations for water, made under the direction of Captain Humphreys, of the Topographical Corps, have proved successful—water in abundance is found at various depths. We trust that the Pacific Railroad will soon be added to those on the mail transportation routes.

#### SONORA MINING & EXPLORING CO.

A company was formed in Cincinnati a year ago under the above title. The object proposed in the organization was to acquire and develop some of the old mines in the Gadsden Purchase, that were opened originally by the Spanish Jesuits, and abandoned by them in consequence of the exterminating war with the Apaches.

An idea may be formed of the value of these mines from the following results of some of the more southern Mexican mines, which yield a poorer ore, but in great abundance. Humboldt estimated the whole produce of the Mexican mines in 1803 at \$1,767,952,000. Zambrano paid, as a tax of one-fifth the proceeds of this mine, \$11,000,000. The mine of Arevalo, in 1811, yielded, in seven weeks, \$200,000 from one level called El Divino Paster. The Biscaina vein, which in 1726 had produced \$4,341,600, and was subsequently abandoned on account of water, was re-opened in 1762, and in twelve succeeding years produced \$6,000,000. The mines discovered by the Indian brothers Arauco, in the district of Morelos, in 1826, produced in two months \$270,000. In 1825 the owner of the mine of Nuestra Sonora de Guadalupe refused \$1,000,000 for the privilege of working it *three* years. The above will give some idea of the production and value of a few of the Mexican mines.

The Sonora Company have information of the definite occupation of the two old mines, Salero and Ojero, near Tubac. The Salero is a mine that had considerable favor among the inhabitants of Sonora, and was reputed to be very rich. In the same range, and within a circle of a mile and a half in diameter, they have discovered twenty-four veins of silver



ore. The agent, Mr. Poston, had erected a muffle oven, and it was expected to be in blast by Jan. 1. He had also purchased the famous Arivaca Rancho, one of the most fertile and healthful in the whole Gadsden Purchase. Besides containing nearly twenty thousand acres of valuable agricultural land, it contains twenty-five veins of ore, several of which were opened by the Spaniards, and were celebrated for their richness.

Such are the present prospects of this company. If they proceed with their work with the energy they have thus far displayed, and develop their mines, their enterprise cannot fail to be highly remunerative. Any one of the old mines now in their possession, if worked with energy and skill, would produce in our day results equal at least to those obtained with the imperfect processes of the earlier Spaniards.

Cincinnati may well be proud that she is the first in the field in the rich silver region which we possess. The company propose to sell a limited amount of stock, with a view of placing their mines in an immediate development and the acquisition of further territory. Information can be had at the office of the company in this city. EDGAR CONKLING, Esq., Agent.

Since the above was written, we have been shown a dispatch from the agent of the company, dated Tubac, Jan. 1, in which he says: "I beg leave to inform you at the earliest moment of the conclusion of the purchase of La Aribac, which was finally completed, and the title papers vesting the same in our President, fully made out, signed and acknowledged on the 27th ult. Copies of which will be duly forwarded in my report of this date.

"This is the most valuable tract of mineral land of the same size in the territory, and contains within its boundaries *twenty-five silver mines* that we know of, and probably one hundred unknown and undiscovered. Those formerly worked are rich, and were only abandoned on account of Apaches.

"The title is perfect and possession since 1802. Boundaries well defined—no adverse claims—no squatters on the land or mines, and full possession can be immediately taken.

"You are aware that the change of sovereignty from Mexico to the United States, invests the owner of the soil with all woods, waters, mines, minerals, &c., as Lord paramount, and such we stand in Aribac—absolute owners of all the mines.

"I consider this immensely rich mineral land in possession, more valuable than Fremont's great Mariposa claim out of possession, for several reasons. Silver is easily worked, and at but little expense. Gold-bearing quartz is hard, and involves heavy expenditures for machinery, &c."

The above information renders it certain, that this company is now in possession of the

most valuable mining property in our country.

#### NEW YORK AND ERIE RAILROAD.

We see it stated in the eastern papers, that D. C. McCallum, so long bepudded by the New York organs as the "model superintendent," is about to resign his position on the New York and Erie Railroad. This movement is supposed to be the result of dissatisfaction on the part of the Directors. We have but a word to say in this matter. Mr. McCallum is now just as good a superintendent as he ever was, and if his mode of discharging his duties is such as to warrant his compulsory resignation, without even a place being provided for him to go to, he never should have been lifted by these same parties towards the pinnacle of fame on which they have so long been striving to put him. The truth is, that Mr. McCallum has been just as good a superintendent as any other man, of fair talents, and an average amount (or perhaps a little more), of self respect, who was aiming after notoriety, and who would have his own way under any contingency, would have been; and we see nothing in his course to justify a compulsory removal, if he ever gave the directors the satisfaction they claim to have felt. But we never believed that the shrewd business men, who compose the directory of this road, were as satisfied with its management as they claimed. They found Mr. McCallum a willing foot-ball, ready to be kicked into the air at any, however trivial, occasion of newspaper notoriety, and between bepudding him and his management, contrived to keep puffs and notices of the road continually circulating. Mr. McCallum's quarrel with his engineers, has put an end to this, and therefore he will no longer do. And yet this quarrel with the operatives was but the legitimate result of the system which he had always pursued. However, this is over, Mr. McCallum is to resign, and some one else is to be taken up, whether to go through the same aerial evolutions in the New York press or not, remains yet to be seen.

#### RAILROAD COMMISSIONERS, MICHIGAN.

The following gentleman have been appointed Railroad Commissioners for this state, under the act granting lands to Railroads. Charles Upson, of Branch; Wilder D. Foster, of Kent; Charles Tripp, of Washtenaw; George W. Lee, of Livingston; Charles A. Trowbridge, of Wayne, and Harmon C. Chamberlin, of St. Clair.

#### MEMPHIS AND LITTLE ROCK RAILROAD.

The following gentlemen have been elected Directors of the Memphis and Little Rock Railroad: D. B. Turner, Sam. Tate, James Elder, R. C. Brinkley, H. B. Edmondson.

## Railroad Daguerreotypes.

#### No. LV.

#### GEORGIA RAILROAD & BANKING CO.

The report of this company is dated February 1, 1857. The following are its officers:  
President—JOHN P. KING, Augusta.  
Superintendent—GEO. YONGE, "

#### DIRECTORS.

JOHN BONES,  
SAMUEL BARNETT,  
WM. M. D'ANTIGNAC,  
JOHN CUNNINGHAM,  
ASBURY HULL,  
GEO. P. JACKSON,  
THOS. B. PHINIZY,  
RICHARD PETERS,  
HAYS BOWDRE,  
WM. D. CONYERS,  
JAS. W. DAVIES,  
J. N. HAMILTON,  
E. E. JONES,  
A. POULLAIN,  
BENJ. H. WARREN,  
One vacancy.

The ANNUAL MEETING of the stockholders is held on the first Tuesday after the second Monday in May.

The CAPITAL STOCK is as follows:

Number of shares.....	41,560.
Price per share.....	\$100.
Capital.....	\$4,156,000.
Dividend.....	8 per cent. per annum.
Am't of last dividend...4 per cent. 6 months, or	\$166,240.

#### RUNNING EQUIPMENTS.

No. of locomotives.....	56.
Passenger cars, 1st class 12.	
" " 2d " 6.	
Bag. & Mail " 8.	
Freight " 700.	

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends March 31:

#### RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$340,005 95	342,607 68	322,548 55
Freight.....	547,487 99	618,583 16	701,150 47
Mails.....	44,373 65	44,503 57	44,503 57
Cost of operation.....			\$517,852 24
Improvements.....			192,660 93

#### DETAILS OF CONSTRUCTION.

Length of main line.....	171 miles.
Washington branch.....	18 "
Athens ".....	40 "
Warrenton ".....	4 "
Termini.....	Atlanta.
Gauge.....	5 feet.
Single track.....	133 miles.
Sidings.....	20 "
Length of rail bars.....	16 to 20 feet.
Weight per yard.....	59 lbs.
Kind of iron.....	American and English.
Kind of rail.....	U and T.
Wear and tear.....	12 per cent.
Ties.....	26,000.
Kind of wood.....	Pine and Chesnut.
Length.....	8 feet.
Size.....	8 by 10 inches.
How often changed.....	Once in 4 years.
Fuel.....	Wood.
Telegraph on road.	

#### No. LVI.

#### KNOXVILLE & KENTUCKY R. R.

The report of this road is dated January 30, 1857. The following are its officers:

President—JOHN JARNAGIN, Clinton, Tenn.

Secretary and Treasurer—JOHN L. MOSKES, Knoxville, Tenn.



## DIRECTORS.

JOHN JARNAGIN,  
O. P. TEMPLE,  
R. M. LONGMINE,  
R. D. WHEELER,  
WM. M. CHURCHWELL,  
A. L. MAXWELL, JR.,  
THOS. C. LYON.

The ANNUAL MEETING of the stockholders is held on the fourth Wednesday in March.

The proposed termini of the road are Knoxville, Tenn., and a point on the Kentucky State line; length 63 miles.

Means for the construction of the first section of 30 miles have been secured, and the work of construction is in active progress. This section will tap the coal measures of the Cumberland Mountains.

## No. LVII.

## ESSEX RAILROAD.

The report of this company is dated November 22, 1856. The following are its officers:

President—DAVID SINOREE, Salem, Mass.  
Treasurer and Secretary—JOHN B. PARKER, Salem, Mass.

Superintendent—JER'H PRESCOTT, Somerville, Mass.

## DIRECTORS.

STEPHEN A. CHASE, Salem, Mass.  
N. B. MANSFIELD, " "  
NATH'L WESTON, " "  
HENRY G. GRAY, Marblehead, Mass.  
J. M. SAUNDERSON, Lynn, "

The ANNUAL MEETING of the stockholders is held in July.

The CAPITAL STOCK is as follows:

Number of shares.....7,000.  
Price per share.....\$100.  
Capital.....\$700,000.

The NETS of the road are:

1st mortgage.....\$350,000.  
Floating debt.....262,676 94.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends Sept. 30th:

## RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$36,223 50	\$22,325 23	\$19,831 64
Freight.....	14,087 26	16,636 77	24,095 84
Mails.....	1,711 86	359 12	43 46
Express.....	306 37	494 99	465 98
Miscellaneous & rents	9,077 60	9,540 55	9,429 42
Cost of operation....	\$36,242 76	\$40,592 34	\$49,482 99

## DETAILS OF CONSTRUCTION.

Length of road.....20 miles.  
Termini.....Salem and Lawrence.  
Single track.....20 miles.  
Double track.....2 "  
Sidings.....4400 feet.  
Length of rail-bars.....18 feet.  
Weight per yard.....58 lbs.  
Kind of iron.....English and American.  
When laid.....1846, 1847 and 1848.  
Kind of rail.....T.

The Essex Road is operated by the Eastern Road, under contract.

## No. LVIII.

## SALEM &amp; LOWELL R. R.

## OFFICERS.

President—CHAS. F. FLINT, North Reading.  
Treasurer—N. B. PERKINS, Salem.  
Secretary and Superintendent—F. H. NOURSE, Lowell.

## DIRECTORS.

CHAS. F. FLINT,  
S. C. PHILLIPS,  
SIDNEY SPALDING,  
J. B. FRENCH,  
J. W. PEELE,  
W. E. LIVINGSTON,  
C. LIVINGSTON.

The ANNUAL MEETING of the stockholders is held on Tuesday following first Monday in January.

The CAPITAL STOCK is as follows:

Number of shares.....4,000.  
Price per share.....\$100.  
Capital.....\$400,000.

## RUNNING EQUIPMENTS.

Number of Locomotives.. 3.  
Passenger cars, 1st class 3.  
Baggage " ..... 1.

Road mortgaged the present year. B. W. Silsbee, Trustee.

The following are the results of operation for the years 1854 and 1855. Nov. 30:

## RECEIPTS.

	1854.	1855.
Passengers.....	\$36,302 00	\$27,283 51
Freight.....	11,941 46	39,022 90
Mails.....		504 39
Express.....	400 00	
Miscellaneous.....	69 00	73 00

## DETAILS OF CONSTRUCTION.

Length of road.....16.882 miles.  
Termini.....South Dam and Tewksbury Junction.  
Gauge.....4 feet 8½ inches.  
Single track.....16.882 miles.  
Sidings.....1,734 "  
Length of rail-bars.....16 feet.  
Weight per yard, rail.....58 lbs.  
Kind of iron.....English.  
When laid.....1849.  
Kind of rail.....T.  
Ties.....Oak, Chesnut & Cedar.  
Length.....7 feet.  
Size.....4 & 5 by 5 inches.  
How often changed.....In 6 years.  
Ballast used.....Gravel.  
Fuel.....Wood.

This road is operated by the Lowell & Lawrence R. R. Co.

## No. LIX.

## RUTLAND &amp; WASHINGTON R. R.

The report of this company is dated December 1, 1856. The following are its officers:

President—JAS. A. CORRING, New York.  
Secretary—GEO. W. STRONG, Rutland, Vt.  
Superintendent—J. WILNER, Poultney, Vt.

## DIRECTORS.

JAS. A. CORRING,  
GEO. W. STRONG,  
F. E. WOODBRIDGE,  
T. H. CANFIELD,  
MERRITT CLARK,  
O. D. ASHLEY,  
J. W. BISHOP.

The road is run and managed under the direction of the Trustees.

The annual meeting of the stockholders is held on the 12th of March.

The CAPITAL STOCK is as follows:

Number of shares.....950.  
Price per share.....\$100.  
Capital.....\$950,000.

The company have recently issued a new series of bonds, secured by mortgage upon the entire road, franchises and furniture, payable April 1, 1875, with semi-annual interest at 6 per cent., payable 1st of April and October, at the Commercial Exchange Bank, New York city, for the total amount of the funded and floating debt of the company.

TRUSTEES—F. E. Woodbridge, Vergennes, Vt.; Benj. E. Bates, Boston, Mass.; James A. Corring, New York.

## RUNNING EQUIPMENTS.

Number of Locomotives..10.  
Passenger cars..... 6.  
Baggage " ..... 3.  
Express " ..... 2.

The following are the results of operation for five months ending August 31, 1856:

## RECEIPTS.

Passengers.....	\$26,432 18
Freight.....	38,259 94
Mails.....	2,583 30
Express.....	1,250 00
Cost of operation, including renewals of iron and ties and rebuilding an engine.....	\$72,080 22

## DETAILS OF CONSTRUCTION.

Length of road.....62½ miles.  
Termini.....Rutland & Eagle Bridge  
Gauge.....4 feet 8½ inches.  
Single track.....62½ miles.  
Length of rail.....18 feet.  
Weight per yard, rail.....56 to 60 lbs.  
Kind of iron.....English and American.  
When laid.....1850 and '51.  
Kind of rail.....T.  
Ties.....2051 per mile.  
Kind of wood.....Tamarack and Oak.  
Length.....7 and 8 feet.  
Size.....6 by 6 inches.  
How often changed.....25,000 renewed in 1856.  
Ballast used.....Quartz & Slate Gravel.  
Kind of fuel.....Wood.  
Amount per annum.....6,500 cords.

REMARKS.—The Rutland & Washington R. R. assists in forming the Northern line between Albany and Boston; also the direct route from the West to all points in Vermont, New Hampshire, and the Northern portion of Massachusetts. It is also the connecting road forming the North and South railroad line between New York and Montreal. It connects with the important trains of the New York Central Railroad at Albany and Troy; at Rutland with the Rutland and Burlington Railroad for Bellows Falls, Keene, Brattleboro', Greenfield, Mass., Fitchburg, Groton Junction, Nashua, Worcester, Lowell, Concord and White Mountains.

The road was placed in the hands of the Trustees last April, in a dilapidated condition; since then it has been generally overhauled, both superstructure and furniture.

The Baltimore and Ohio Canal, it is announced, will be open about the 1st of March. Should the weather continue favorable, the Canal Commissioners of Pennsylvania purpose to have the whole length of the Pennsylvania Canal open also by the 10th of March. The line has suffered but very little from the late freshet, and the necessary repairs are already mostly completed.



## Railroads.

### LITTLE MIAMI R. R.

The Report of this company for the year 1856 is the First Joint Annual Report to the Little Miami R. R. Co. and the Columbus & Xenia R. R. Co. It is the Fourteenth Report of the Little Miami and the Seventh of the Columbus & Xenia. The Report shows the gross receipts of the two roads to have been \$1,200,636; and the expenses to have been 47.24 per cent. of the gross receipts. This shows a gross receipt of \$8,765 per mile, or nearly \$2,000 per mile over the average receipts of the railroads of the country. This should be a gratifying fact to the stockholders.

The Report of the Presidents states:

"Our track is in excellent order. Substantially constructed, and carefully improved from year to year, whenever any defects were discovered in its location or construction, it is kept in good repair, and is inferior to no road whatever in smoothness, solidity, and the capacity to admit the safe and rapid transit of heavy travel. Our equipment is in like good condition, equal in all respects to what it was at the date of our last reports. The capitals of the two companies have been kept sound, their assets increased in value, and a balance of \$525,844 24 reserved for surplus.

"Our income the past year has been \$1,257,735, of which \$1,209,636 is from passengers, freight, and the mail, an excess of \$192,455 90 over the receipts from the same sources during the previous year, being equal to about 19 per cent. While the receipts from passenger travel, through and way, exceed those of the preceding year by \$10,807 78, yet, by reference to the tables accompanying the Superintendent's report, it will be seen that, numerically, the passengers have been less than the previous year. The causes of this falling off are traceable to the low stage of the Ohio river, preventing the southern and southwestern travel from reaching Cincinnati during a large portion of the year, and its consequent deviation from our line by railroads terminating at Cairo and St. Louis. Our way travel over the "Columbus & Xenia" appears less than last year, because, in part, we then designated all passengers as "way" who were brought to our road by the Springfield & Columbus Railroad, while of the past year we have classed them as "through passengers." As to the former cause, that will be removed, to a considerable extent, with the completion of the Ohio & Mississippi Railroad, which is expected to be in operation between Cincinnati and St. Louis early in the coming spring. The work on its construction has been vigorously prosecuted under its present efficient administration, and no pecuniary obstacles now interfering with

its steady progress, we anticipate speedy and valuable contributions to our business from this important road. In view of these, and the largely increased number of passengers and amount of freight we will receive from our other many and important connections, we venture little in assuming that the business of our roads during the coming year will considerably exceed that of the past year; in anticipation of which we are adding to our equipments and all the necessary facilities of transportation.

"The reasons given in our former reports for withholding cash dividends operated on your Boards during the past year. As the result, our debt, floating and funded, has been considerably reduced during the year; the former \$62,356 68, and the latter \$72,900—in all, \$135,256 68. Special deposits, drawing interest, have also been made, to pay \$50,000 of the \$60,000 of C. & X. Bonds which were issued to the Central Ohio Company, due February next; and \$100,000 to meet that amount of bills payable of the L. M., due June and July next. We have on hand upward of \$100,000 cash, which, with our current net earnings, we hope will be sufficient to pay our maturing liabilities, and enable us to declare cash dividends in June next, and regularly thereafter.

"We have the satisfaction of being able to congratulate you upon the continuance of our friendly relations with all the railroad companies with which we have any business intercourse. The mutuality of our interests has been recognized by them during the past year, and the most liberal dispositions generally evinced to accord to our roads all the merit we claim for them. To these friendly demonstrations we have cordially responded; and it will be our pleasure, as it will be for your interest, to have our future intercourse characterized by like relations. The railroad interests of the country are of great and rapidly increasing magnitude, and nothing is more certain than that their permanent prosperity essentially depends on preserving the most kindly relations between those entrusted with their management. Many of the mischiefs resulting from real or supposed rivalry between competing roads would be materially lessened, if not wholly prevented, by frank and liberal intercourse between their officers, which would be alike profitable to their stockholders and promotive of the permanent interests of the public.

"Mention has been made of the surplus fund of the two companies being \$525,844 24. This is made up, in part, of the following items, which appear among the assets in the balance sheets of the individual companies, viz:

Spring., Mt. V. & Pitts. R. R. stock (L. M.)..	\$200,150 00
Hillsboro' & Cincinnati R. R. " "	1,444 72
Advance to Lake Erie Steamers, " "	32,630 40
	\$234,225 12

Springfield & Colum. R. R. stock (C. & X.)..	50,000 00
Dayton, Xenia & Belpre " "	51,000 00
Advance to Lake Erie Steamers, " "	15,369 60
Sundry individual accounts, " "	742 96
	\$351,337 68

All of which we recommend to be charged to account of loss, which being done, will leave our undivided balance \$174,506 56.

"During the past month the bonds, coupons and certificates of stock of the Little Miami Company, from the commencement of the issue of the same to the 1st inst., were carefully examined by competent persons, under the supervision of two members of the Board, appointed for that purpose, and were found to be correct, and in conformity with the company's books and accounts. At the same time a like examination was made of the accounts and vouchers of the Treasurer of the two companies, which were also found to be correct.

The Report of the Superintendent states:

"The winter of 1855-6 was one of unprecedented severity in this latitude—the thermometer sinking to 10° below zero in each of the months of January, February and March, and in one instance, in the month of February, to 30° below zero. The effect of this intense degree of cold was to derange the running of trains to a greater extent than usual at this season of the year, and to cause the breaking of a large number of wheels, and serious injury to the iron rail. These injuries and losses, as will be seen on reference to the items of expenditure, have been made good by repairs and renewals; and I think we may safely calculate that the road and its equipments are in as sound and serviceable a condition as at the date of my last report.

"No passenger has been killed or seriously injured by failure of machinery or negligence on the part of the agents of the companies. A German woman got off the cars of a night train at Loveland, without the knowledge of the conductor, and in attempting to get on again after the train had started, was drawn under the wheels and fatally injured. The stop made by the train was for wood and water, and the usual signals were given before starting. Two serious accidents have occurred to the machinery: the first in March, at Spring Valley, where, by the mistake of the switch-tender, the Express Train, running at great speed, was turned in upon the Accommodation Train, which was waiting upon the side track for it to pass; and the second at Big Darby bridge, in August, where a night Freight Train ran over an ox and had seven cars thrown from the track, and the cars and contents badly damaged. By the first accident, Mr. Charles Hunt, the engineer of the Express Train, a young man of excellent character and great promise, lost his life.

"As will be seen on examination, the expenditures for repairs of road, station buildings, water stations, passenger and freight cars, damage, and general expenses, have



been increased, while the charge to repairs of locomotives, bridges, fuel, and oil and tallow accounts, has been diminished. The explanation will be found under the head of the proper accounts.

The gross receipts of the two roads for the transportation of passengers, freight and mail, have been.....\$1,209,636 00  
The current expenses, as reported by the Treasurer.....562,675 01

Leaving, over expenses, net earnings...\$646,960 99  
And making expenses 46 51-100 per cent. of gross earnings. To the expenses, however, should be added the following sums, the vouchers for which could not be obtained in time to go upon the Treasurer's books:

Balance due Eastern agents.....\$1,500  
" " on mileage of freight cars, estimated 1,000  
" " on freight cars destroyed, belonging to other companies.....1,950  
Proportion of the cost of a locomotive engine, to make good depreciation due to this year.....2,000  
Loss on wood sheds by fire, etc., not provided for.....1,300

Making total actual and estimated working expenses, \$571,425 01, or 47 24-100 per cent. of the receipts.

"The accounts for the year have been kept with a view to determine the relative cost of transporting passengers and freights. The proportion chargeable to each, for use of track, fuel, water, and some general expenses, has been arrived at, by estimate, from the most reliable data in my possession. The remainder is made up from actual payments, and the whole may be considered as a very close approximation to the truth.

The freight earnings have been.....\$665,404 06  
do expenses have been.....329,667 96

Leaving, for net earnings on freight....\$335,736 10  
Or, expenses 51 4-100 per cent. of the receipts.

The passenger earnings, including mail, which is added, as it is carried upon passenger trains, have been.....\$544,231 949  
The expenses have been.....223,007 05

Leaving, for net earnings on passengers.\$321,234 89  
Or expenses 40 97-100 per cent. of the receipts.

"The expenses on some classes of freight carried were over 70 per cent. of the receipts. The earnings for the carriage of express matter are included in freight receipts.

#### GRAND RAPIDS & NORTHERN R. R.

FROM GRAND RAPIDS TO LITTLE TRAVERSE BAY.

*Report Presented to the Board of Directors at their Meeting, Jan. 3d, 1857, by WM. P. INNES, Chief Engineer.*

*To the President and Directors of the Grand Rapids & Northern Railway Co.:*

GENTLEMEN: In the discharge of the duties of my appointment, I have made a thorough reconnaissance of the country lying between the point to be connected by your road, and nearly all the necessary instrumental surveys preliminary to a definite location of the route.

From the city of Grand Rapids to Big Prairie, in Newaygo county, two surveys have been made—one by way of Newaygo, and the other by the way of Croton (both places in Newaygo county), which lines are marked and designated on the maps and profiles which accompany this report as "Newaygo Line" and "Croton Line."

From Big Prairie, the junction of the two lines, but one route has been surveyed to the northern terminus of your road.

The line adopted for the location of your road to Big Prairie, by way of Newaygo, commenced from a point on the west side of Grand river, at Grand Rapids, near the depot of the Detroit and Milwaukee Railway Company, running a little westerly of north to Newaygo village, where we cross the Newaygo river. The crossing of the river at this point is rather formidable, and has to be accomplished by running through the village, down Main street, and crossing the river above what is called the court house square.

At this point the Muskegon river is three hundred feet wide, and is crossed about sixty feet above the surface of the water, and upon an angle of fifteen degrees from our line.

From Newaygo the course of our line follows up and runs parallel with the Muskegon river for the distance of about a mile, where we attain the height of the "second bluff," so called. From thence we follow up the Bigelow creek and make the "high lands," and run thence on a straight line to Big Prairie, the point of intersection with the Croton line.

Our line from Grand Rapids, by the way of Croton, to Big Prairie, starts from the same point, near the Detroit & Milwaukee Railway Company's depot, and runs about due north, up the valley of the Rouge river, to the vicinity of the head waters of said river, to a point where we pass the dividing ridge between Rouge and Muskegon rivers, and crossing the latter river about half a mile west of the village of Croton. At the crossing of the river at this point we encounter some very heavy grading.

Our grade line here is sixty feet above the river, and we cross about five degrees from a right angle. The river here is three hundred and seventy-five feet wide.

From Croton we run a very little west of north, to Big Prairie, passing through Marengo Prairie.

From Big Prairie the course of our line is a little east of north, and is generally very favorable for railroad construction.

About twelve miles north of Big Prairie we cross the head waters of the White river, with little or no obstruction, over a generally level country, until we get to a point called "Turkey Hill," which is overcome by a short grade of forty feet to the mile; then we pass over a favorable country to the south branch of the Pere Marquette river, and overcome the summit in a distance of seven thousand feet, and with a grade of twenty-five feet to the mile.

Passing thence into Lake county, we cross the north branch of the Pere Marquette river, and strike the south of Wexford county.

The dividing ridges between these streams are remarkably favorable, and are overcome by a maximum grade of twenty feet to the mile.

Through Wexford county the country is very favorable for railroad construction. Near the north line of this county we cross the Big Manistee very favorably indeed. The river at this point is about one hundred and fifty feet wide.

From this point we pass into Grand Traverse County, crossing the Grand Traverse or Boardman River, near the centre of the County, and running to the east arm of Grand Traverse Bay, from which point we run westwardly of north to Little Traverse Bay.

These surveys and examinations exhibit a most satisfactory result as to the generally favorable features of the country, for the construction of the Road, at a moderate expense,

affording a very direct line, with easy grades and curves, and requiring the removal of a small quantity of earth as compared with our eastern Railroads.

The excavations on the route will consist chiefly, of loam, sand and gravel, as there is no indication of either hard-pan or rock, throughout the entire line.

GRADES.—The gradients upon the line vary from five feet to forty-five feet per mile, as shown in the table below.

Level.....	60 miles.
Grades under 10 feet per mile.....	12 "
" " between 10 and 20 feet per mile.....	18 "
" " 20 and 25 " " ".....	54 "
" " 30 and 45 " " ".....	30 "

The maximum grades need, in no case, to exceed forty-five feet per mile, and will occur at only a few points on the line, and be of but short extent.

One hundred and fifty miles of the entire line is under twenty-five feet grade to the mile.

The extent of gradients exceeding forty feet per mile, is three miles, ascending southerly in the direction of the greater traffic of your road, as is supposed.

Where the steepest grades occur, the line is wholly straight, or curved so slightly as to offer very little resistance to the movement of the cars or motive power, on account of curvature.

The rates of inclination are fully within the effective grades of locomotive power, as is evident from the fact that a heavy and handsome paying traffic is carried on upon several of the prominent Railroads in the United States having grades of sixty feet and upwards per mile, viz: Upon the Western Railroad in Massachusetts, grades occur as high as eighty-five feet per mile; upon the New York and Erie Railroad sixty-five feet per mile is frequently encountered, and upon the Baltimore and Ohio, a ratio of inclination as high as one hundred and fifteen feet has been found necessary.

CURVES.—The amount of curvature upon the line, as compared with the whole distance, presents an uncommonly favorable feature, as will appear by the following statement:

Curved line, - - - - -	16 miles.
Straight, - - - - -	158 "

Indicating about 90 per cent. of the entire length of your road is straight line.

The maximum radius of curvature will be 5,730 feet, and occurs only where the grades are level or nearly so.

COST OF ROADS.—The estimates of the cost of your road have been made with reference to the construction of a first-class road, laid with T Rail weighing not less than sixty pounds to the yard, as it is important that it should be capable of transporting rapidly, and at a moderate expense, the large amount of freight and passengers that at no distant day, will inevitably pass over it.

These estimates include full provision for the right of way, grading, bridging, superstructure, depot grounds, equipments, engineering and office expenses.

I have no doubt the expense of construction may be reduced by spending more time and labor on the location of the line, and thus reduce the cost below the estimates now made.

An actual location of the line, and contracts made for its completion, will afford a more satisfactory test of the estimates, than any arguments or suggestions that your engineer might offer.

The estimates are arranged into two sections, as follows:



## SECTION NUMBER ONE.

Extends from the city of Grand Rapids to Traverse Bay, via Newaygo, a distance of one hundred and seventy-four and a half miles:

Land and Damages,.....	\$5,000
Grubbing and Clearing,.....	104,400
Earth Excavations,.....	1,211,000
Truss and Arch Bridges,.....	25,000
Small bridges and Culverts,.....	75,000
Miles of fencing,.....	57,300
Superstructure, Laying Track, &c.,.....	152,600
Miles of track, including turn-outs,.....	1,596,000
Depot Building,.....	100,000
Locomotive, Cars, &c.,.....	475,600
Incidental Expenses, Engineering, &c.,.....	100,000

Total.....\$4,010,600

## SECTION NUMBER TWO.

Extends from the city of Grand Rapids to Traverse Bay, via Croton, a distance of one hundred and seventy-one miles:

Lands and damages,.....	\$5,000
Grubbing and Clearing,.....	102,600
Earth Excavations,.....	1,247,250
Truss and Arch Bridges,.....	25,000
Small Bridges and Culverts,.....	75,000
Miles of fencing,.....	51,720
Superstructure, Laying Track, &c.,.....	149,000
Miles of Track, including turn-outs,.....	1,570,800
Depot Buildings,.....	100,000
Locomotive, Cars, &c.,.....	475,000
Incidental Expenses, Engineering, &c.,.....	100,000

Total.....\$3,914,970

## SUMMARY.

Cost of Road, via Newaygo, including Grading, Superstructure, Sidings, Equipments, Engineering, &c. &c.,.....	\$4,010,600
Cost of Road, via Croton, including Equal to \$22.953 39-100 per mile, say.....	\$23,000
Grading, Superstructure, Sidings Equipments, Engineering, &c.,.....	\$3,914,970
Equal to \$22.694 15 per mile, say.....	\$23,000

The delays and expense which naturally occur in the settlement of the right of way over so long a line of Railroad, will be obviated almost entirely on this route, as we have already negotiated with most of the parties on the line for their right of way free of cost.

The company have also received liberal grants of land at different points for depot grounds, &c.

This is a source of gratification, as it shows the interest felt by all those living on the line at the road, as well as the speculators who own land on the route.

In the present newly and thinly settled conditioned of the part of the country through which your line runs, no certain calculations can be made of the amount of revenue derivable from a road constructed through it; but let the road be built and open to this comparatively secluded region, a certain and speedy means of communication at all times and seasons of the year, with an Eastern and Western market and the change would be like a magic.

The dense forests would disappear before the ax of the hardy emigrant, water powers would be improved, towns and villages would spring up, and a new impetus would be given to every enterprise, and the construction of the Road ensure a remunerative profit to the Stockholders.

It must be evident to any person conversant with the region of country tributary to your road, that it possesses all the elements in the fertility of its soil, the salubrity of its climate and the industrious and energetic character of its inhabitants, for becoming one of the most wealthy and populous portions of the West.

The amount of business already transacted at the mouths of the different rivers that we cross, is immense for so new a country; and the most visionary speculations with reference to the increase of business and the amount of traffic that must flow backward and forward between the Northern Peninsula of this State, and the Eastern and Western

market, on the completion of this outlet, may fall far short of the reality that the next ten or fifteen years will exhibit. For the transportation of lumber to our large and magnificent Western prairies, the wants of the community and the spirit of the age imperatively demand a more certain and speedy method of transit than exists at present.

The dense pine forests will furnish all the freight your road can carry for the next half century, and these same lands, when cultivated, will produce abundant crops of wheat and other grains.

In the event of the construction of the Northern Railroad, industry and enterprise will seize upon its many advantages and turn them to a profitable use. This the history of our people in every portion of our wide spread Republic demonstrates.

Increase of travel and trade has uniformly kept pace and generally been in advance of the facilities afforded them by the erection of public improvements.

Pack horses, mud roads; turnpikes, canals, and iron railways, have each in turn, proved the truth of this declaration.

The completion of this thoroughfare, will open to the manufacturer and mechanic a new region for his fabrications, and secure to him new facilities and certainties of obtaining supplies.

The success of the enterprise depends upon the active and substantial aid of those whose means enable them to be just to their own interests, and with a united effort, this work can be accomplished, and its beneficial influence upon the growth, wealth, and prosperity of our own City and Northern country generally be permanently secured.

Respectfully submitted.

WM. P. INNES, Chief Engineer.

## A BILL.

*Disposing of certain Grants of Land made to the State of Michigan for Railroad purposes, by act of Congress, approved June 3, 1856.*

Section 1. The people of the State of Michigan enact, That the lands, franchises, rights, powers and privileges granted to and conferred upon the State of Michigan by an act of Congress entitled an act making a grant of alternate sections of the public land to the State of Michigan to aid in the construction of certain railroads in said State, and for other purposes, approved June 3, 1856, be and the same are hereby accepted with the restrictions and upon the terms and conditions contained in said act of Congress.

Sec. 2. So much of the aforesaid lands, franchises, rights, powers and privileges as are or may be granted and conferred in pursuance of said act of Congress, to aid in the construction of a Railroad from Amboy, by the way of Hillsdale and Lansing, to some point on or near Traverse Bay, are hereby disposed of, granted to, conferred upon and vested in the Amboy, Lansing and Traverse Bay Railroad Co; in like manner all the lands, franchises, rights, powers and privileges which are or may be granted and conferred in pursuance of said act of Congress, to aid in the construction of a railroad from Grand Haven to Flint, and thence to Port Huron, are hereby vested fully and completely in the Detroit and Milwaukee Railway Company, and in the Port Huron and Milwaukee Railway Company, in the manner following to wit: so much of said lands as pertain and attach to said route from Grand Haven to Owosso in the county of Shiawassee, are hereby vested fully and completely in the Detroit and Milwaukee Railway Company, and so much of said lands as pertain or attach to said route from Owosso to Flint and thence to Port Huron, are hereby vested fully and completely in the Port Huron and Milwaukee Railway Company, to aid in the construction of the roads of said companies respectively: in like manner all the lands, franchises, rights, powers and privileges which are or may be granted or conferred in pursuance of said act of Congress to aid in the construction of a railroad from Pere Marquette to Flint, and thence to Port Huron, are hereby vested fully and completely in the Flint and Pere Marquette Railway Company, and in the Port Huron and Milwaukee Railway Company, according to the provisions of the act of Congress relating thereto, under the direction of the Board of Control hereby appointed. In like manner all the lands, franchises, rights, powers and privileges, as are or may be granted and conferred in pursuance of said act of Congress to aid in construction of a Railroad from Grand Rapids to some point on or near Traverse Bay, are hereby vested fully and completely in the Grand Rapids & Iudiana Railroad Company: in like manner all the lands, franchises, rights, powers and privileges which are or may be granted and conferred in pursuance of said act of Congress to aid in the construction

of a railroad from Marquette to the Wisconsin State Line, b and the same are hereby vested fully and completely in the Marquette and State Line Railroad Company: in like manner all the lands, franchises, rights, powers and privileges which are or may be granted and conferred in pursuance of said act of Congress, to aid in the construction of a railroad from Ontonagon to the Wisconsin State Line, are hereby vested fully and completely in the Ontonagon and State Line Railroad Company; in like manner all the lands, franchises powers, rights and privileges which are or may be granted and conferred in pursuance of said act of Congress, to aid in the construction of a railroad from Little Bay de Noquet to Marquette are hereby vested fully and completely in the Bay de Noquet and Marquette Railroad Company; in like manner all the lands, franchises, rights, powers and privileges which are or may be granted and conferred in pursuance of said act of Congress, to aid in the construction of a railroad from Marquette to Ontonagon, are hereby vested fully and completely in the Marquette and Ontonagon Railway Company. All and each of the several railroad Companies mentioned in this section shall be subject to all the conditions, restrictions and obligations imposed upon them by this act, as hereinafter provided.

Sec. 3. The lands, franchises, rights, powers and privileges hereby conferred upon and vested in railroad companies, or either of them, shall be exclusively applied in the construction of their respective lines of railroad, as above designated, and said lands shall be applied to no other purpose whatsoever; and each and every one of said railroads, when completed, shall in all respects, and all its parts, be a first class railroad; and the rail thereof shall be the "T" or continuous rail.

Sec. 4. Said railroads shall be and forever remain public highways for the use of the Government of the United States free from toll or other charge upon the transportation of any property or troops of the United States; and the United States mail shall be transported over such railroads, under the direction of the Post Office Department at such price as Congress may by law direct. *Provided*, That until such price is fixed by law, the Post Master General shall have the power to determine the same.

Sec. 5. Each and every one of said railroad companies is required, by a vote of a majority of the directors thereof, to accept the lands, franchises, rights, and privileges hereinafore conferred, which acceptance shall be embodied in a written instrument, signed by the President, and attested by the Secretary and corporate seal of said company; and in such acceptance, each of said companies shall severally assent and agree to the provisions and requirements of this act; which acceptance shall be filed in the office of the Secretary of the State of Michigan, within sixty days after the passage of this act.

Sec. 6. It shall be the duty of each of said railroad companies on or before the first day of December next, to locate the line of its railroad, and to make complete maps of said line, and to file copies of such maps in the offices of the Governor and Secretary of the State of Michigan; and it shall be the duty of the Governor, after affixing his official signature to the duplicate map of each of said roads, to file them in the department having the control of public lands in the city of Washington; said lines so located shall not be considered absolutely final further than to fix the limits and boundaries within which said lands may be selected, but said company shall have the right to make alterations thereof, when necessary to improve said line: *Provided*, Such alteration shall not materially change or alter such road.

Sec. 7. Each of said companies, after the completion of twenty continuous miles of its railroad, and after the Governor shall have certified to the Secretary of the Interior, that such twenty continuous miles of its road are so completed, then, and not before, said company may sell sixty sections of land included within any continuous twenty miles of its line of road; and in like manner upon the completion of each other twenty continuous miles, it may sell other sixty sections; and so on from time to time until the whole of its road is completed; and after the full and final completion of the entire length of its road, and the acceptance of the same by the Board of Control herein provided, then the company may sell the remainder of the lands hereby invested in accordance with the act of Congress aforesaid, and not before; and none of the lands hereby granted to said several companies shall be liable to taxation for seven years from the first day of September next; except such parts and parcels thereof as shall be actually sold by said several companies pursuant to the provisions of this act, or such as shall be improved.

Sec. 8. For the purpose of securing the construction of the aforesaid railroads, within the time limited, and in the manner prescribed in this act, and for the purpose of properly managing and disposing of the lands appropriated to aid in the construction thereof, the Governor of the State of Michigan, together with six commissioners, to be nominated by the Governor and confirmed by the Senate, are hereby constituted a Board of Control of the same, whose duty it shall be to manage and dispose of such lands in aid of the construction of the aforesaid railroads, in the manner in this act provided, and to do any and all other acts necessary and proper respecting the construction and building of said railroads, which shall be prescribed by law; the Governor shall be ex-officio the President of the said Board; the Commissioners shall hold their office from the time of their appointment until March 4th, 1861. Any vacancies that may occur between the sessions of the Legislature, by death, resignation, or otherwise, shall be filled by the Governor until the first meeting of the Legislature after such vacancy shall occur. The commissioners shall receive five dollars a day and necessary expenses, for each day that they shall be actually employed in the duties of their office; the amount of such allowance and expenses shall be apportioned among the different companies in such a manner as the Board shall deem equitable; and shall be paid by the several companies from time to time as the Board may direct.

Sec. 9. If it shall appear that the lands that have been donated by the act of Congress aforesaid, for the construction of said lines of said railroad, can not be obtained by any or



either of said railroad companies within the limits of six miles on either side of its railroad line, the Governor shall from time to time appoint agents upon the nomination of the President of the respective companies, to make such selection as may be authorized or granted by Congress for the line thereof; but the compensation of said agents, and the costs, expenses and reasonable charges attendant and occasioned by making such selections, shall be paid and borne by the said company; *Provided, however*, that the compensation of agents shall not exceed five dollars a day, besides necessary expenses.

Sec. 10. If it shall further appear that upon any part of the aforesaid lines of railroad, the lands have been so far sold or pre-empted as there does remain within any continuous twenty miles of any one of said roads, and within lateral limits of fifteen miles on either side thereof, the amount of one hundred and twenty sections of land, of which the said company can become possessed according to the provisions of the act of Congress aforesaid, then, and in that case, the agent or agents appointed aforesaid, may select for the benefit of said company, the complement of the said one hundred and twenty sections, upon any other part of the line of the road: *Provided, however*, that in making such selection, they shall be confined to twenty continuous miles: *And provided, moreover*, that such lands thus selected shall in every such case be not less than six miles, nor more than fifteen miles from the line of said road, on either side thereof.

Sec. 11. Should either of said railroad companies fail to accept said lands on the terms of this act within sixty days, or fail to make the survey and maps by the first day of December next, or fail to construct its entire line of road or any part thereof, in the time and manner required, in such case, said board of control shall have the power, and it is hereby made their duty, to declare said lands, so far as they have not been sold in good faith, forfeited to the State, and said board of control are hereby required to confer said lands upon some other competent party, under the general regulations and restrictions of this act.

Sec. 12. All of said railroad companies shall at all times and in all matters, be subject to the laws of this State, and to such rules and regulations as may from time to time be enacted and provided by the legislature of the State of Michigan, in regard to the management and disposition of the said lands, not inconsistent with the provisions of this act and the act of Congress, making said grant of land to this State, and they shall be entitled to all the immunities and privileges conferred by said laws: *provided*, that nothing herein contained shall be so construed as to relinquish the right of the State to any specific tax imposed upon any railroad company within this State.

Sec. 13. It shall be the duty of each of said railroad companies to make a regular annual report of the proceedings of said company at the usual time and place of electing officers, exhibiting a detailed statement of the amount of all expenditures, work, liabilities, means, etc., a copy of which shall be filed in the office of the Secretary of State, and such other reports to the Board of Control as said Board shall from time to time require.

Sec. 14. The right of way, not exceeding six rods in breadth, through any of the unimproved lands belonging to the State of Michigan, is hereby granted to each of the aforesaid companies, and it shall be lawful for the aforesaid Board of Control, at its discretion and upon such terms as they shall deem proper, to grant to any or either of said railroad companies, the right to enter by its workmen and employees upon any lands of this State so owned or held in trust as aforesaid, for the purpose of procuring earth, gravel or other material necessary for the construction of their respective roads, maintaining, repairing or rebuilding the same; and the Board of Control may also grant to said railroad companies any lands owned or held in trust by said State, which said railroad companies may need and require for depots, grounds and any other structures necessary and proper for the use of and maintenance and operation of their aforesaid railroads, upon such terms as such Board of Control shall deem reasonable and proper.

Sec. 15. Whenever by the crossing of the several lines of railroad herein provided for, or by their running within less than thirty miles of each other, or from any other cause conflicting interests or claims shall arise between any of the aforesaid companies in the selection of their lands, such conflicting claims shall be settled by the Board of Control herein provided for, whose decision shall be final in all such cases.

Sec. 16. Said railroad companies shall take said grants of lands with the conditions imposed, and incumbrances specified in this act, and shall in no Court have any claim or recourse whatever upon the State of Michigan, for a misapplication of said grants, or for any of the incumbrances or conditions in this act imposed.

Sec. 17. Said railroad companies shall not issue any railroad shares in the capital stock thereof, as fully paid stock, until the same shall have been thus paid in cash or its equivalent, dollar for dollar, and should any officer of any of said companies issue any such shares, knowing the same to be in violation of the provisions of this section, upon conviction, such officer shall be deemed guilty of a misdemeanor, and shall be fined in any sum not over ten thousand dollars, and he be imprisoned at hard labor in the State prison for any length of time not more than ten years, and all such shares of stock issued in violation of this section, are hereby declared to be fraudulent and void, except it be issued for the purchase of property, materials, or equipments for said railroads.

Sec. 18. The Marquette and State Line Railroad Company shall have power to purchase the railroad, rights and franchises of the Iron Mountain Railroad Company, and the railway, rights and franchises of the Iron Mountain Railway Company on such terms as may be agreed upon, and on the consummation of such purchase, they shall become possessed thereof to the same extent that they are now possessed by said companies.

Sec. 19. Each and every one of the aforesaid railroad companies shall complete and put in good running order at least twenty continuous miles of its road, during each year from and after the 1st day of September next, and shall com-

plete the entire length of its road within seven years from the 15th day of November next. Except the railroads in the Upper Peninsula herein named, and as to these, each and every one of them shall complete the first twenty miles of every several roads within three years from the first day of September next, and the entire lines of their several roads within the time above limited; so much of the Amboy, Lansing and Traverse Bay Railroad as shall lie between Hillsdale and Lansing, and between Lansing and the point of intersection of said road with the Detroit and Milwaukee railroad, shall be completed, fully and entirely, and put in readiness for a train of cars, on or before the first day of November, 1859, and said Amboy, Lansing and Traverse Bay Railroad Company shall build and finish at least twenty continuous miles of its road each year thereafter, until the whole of its line is completed; *provided*, always, that the entire length of its road from Amboy to some point on or near Traverse Bay shall be finished by the first day of November, 1865; *provided*, also, that said Amboy, Lansing and Traverse Bay Railroad Company shall locate their depot buildings at Lansing, within twenty rods of a line drawn due east or west of the Capitol Square, situate on section sixteen in the township of Lansing.

Sec. 20. In consideration of the grants of land and other privileges hereby conferred on each of the several railroad companies mentioned and named in section two of this act, the said several railroad companies are hereby required within sixty days from and after the first day of each and every year to pay into the treasury of this State as a specific annual tax, one per cent. upon the cost of the road and its equipments and appurtenances of whatever kind, and it shall be lawful for the Legislature of this State in their discretion, after ten years, to impose upon either or each of said railroad companies, the payment of a further tax upon the gross or total earnings of such road, of not exceeding two per cent., which said above several taxes shall be in lieu of all other taxes to be imposed within this State, *provided*, that the provisions of this section shall not apply to railroad companies in the Upper Peninsula of this State until after ten years from the passage of this act, *provided*, also, that the aforesaid additional tax of two per cent. shall be imposed upon the Detroit and Milwaukee Railway Co. and the Port Huron and Milwaukee Railway Co., only in proportion to the amount of land which they shall receive in comparison with the quantity of lands received by the other railroad companies, which proportion shall be settled by the Board of Control.

Sec. 21. All the roads constructed under the provisions of this act shall be the same breadth of gauge with the Central and Southern railroads of this State, except the railroads of the Upper Peninsula.

Sec. 22. All companies operating roads under the provisions of this act, shall keep and maintain all their principal offices within this State.

## LEGAL DECISIONS.

**DAMAGES TO EMPLOYEES.**—In the Supreme Court of Ohio, on Feb. 7, 1857, Hon. Judge Scott delivered the opinion of the Court in the case of John Timmons vs. the Central Ohio Railroad Co.:

Present: Hon. T. W. Bartley, Chief Justice; Hon. J. R. Swan, Hon. J. Brinkerhoff, Hon. O. Bowen and Hon. J. Scott, Justices.

No. 50, General Docket.  
John Timmons vs. the Central Ohio Railroad Company. Petition in error on a judgment of the District Court of Muskingum county.

Scott, J., delivered the opinion of the Court. Held: 1. In a suit brought against a railroad company for the alleged negligence of its agents in charge of a train of cars, whereby the plaintiff was run over and seriously injured, if it appears that the plaintiff might, by ordinary care, have avoided the consequences of the negligence complained of, he is not entitled to recover.

2. Where the plaintiff, being in the employ of a railroad company as a brakeman on a gravel train, of his own accord, and on his own business, leaves the train whilst proceeding to its place of destination, and voluntarily attempts to get aboard the same train on its return, whilst its speed is not sufficiently "checked up" to permit this to be done with safety; and, in making the attempt, seizes the rim of a gravel box, which, through defect of material, breaks, whereby the plaintiff falls upon the track and is run over by the train and injured, held: that these facts show such a want of ordinary care by the plaintiff as will preclude him from a recovery.

**DAMAGES TO PASSENGERS.**—The following case of injury by jumping from a passenger train was decided by the Superior Court, in session in this city:

Wilson vs. L. M. R. R. Co. The plaintiff was a passenger on the road of the defendants between Cincinnati and Columbus. He left the position which he had at first occupied, and went into the baggage car, which was partly thrown off the track by a cow in front of the locomotive. The plaintiff, apprehending danger, jumped out, and sustained great injury. At the trial at special term the finding was for defendants, and the case came up now on exceptions to the charge of the Court:

First. That the defendant was permitted to prove that the engineer was a skillful and careful man.

Second. That the plaintiff was not allowed to prove that the place at which he was injured was a dangerous part of the road.

It was remarked by Judge Storer that there was no error in the first charge; and, in relation to the second point, that the assignment was not sustained by the facts alleged in the bill of exceptions. The Court had charged that the defendants should be held to the greatest possible care and diligence. The real question was whether it was the duty of the defendants to fence the

road at this point; but as this must depend upon the surrounding circumstances, the plaintiff had the full benefit of all the implications against the defendants. While railroad companies would be held to strict accountability, they could not be held to be the absolute insurers of the lives and limbs of their passengers. In this case the Court had applied the severest tests known to the law. The decision below was affirmed. Corwin & Prohaska for plaintiff; Fox & Fruch for defense.

**COLLECTION OF A NOTE.**—The following case was heard at the recent term of the Superior Court in this city:

Cincinnati & Chicago Railroad Co. vs. the Newport Safety Fund Bank and A. O. Gilbert—Before Judge Spencer.—To enjoin the collection of a note for \$5,000 given by plaintiff to Newport Bank, and to enjoin the sale of \$10,000 of bonds of the company deposited as collateral security for the note. Plaintiffs claimed the note was not predicated upon a sufficient consideration, as it was given as the purchase of small bills of the bank, which it is said the bank had no authority to issue. Also, that by reason of failure of the bank before the maturity of the note, and the depreciation of the bills of the bank, which it was bound by special agreement to keep good till the maturity of the notes, there is a failure of consideration.

Gilbert, the present holder of the note and bonds, claims to be a *bona fide* purchaser of the note before maturity, without notice of the consideration.

The evidence was heard, and the case stands over for argument.

**UNION CANAL PA.**—Yesterday morning the annual meeting of Stockholders of the Union Canal was held at their rooms, in Walnut street, below Third. Mr. John A. Brown was called to the chair, and Mr. Oscar Thompson was appointed to act as Secretary. The annual report of the Board of Managers was read by the President of the Company, Mr. R. Rundle Smith. From the report we glean the following facts:—

The ordinary receipts for the year were \$110,245.29. Of this sum there were for tolls, \$107,814.43. Received for tolls in 1855, 72,915.34

Increase for year, \$34,929.09  
Or 47 per cent.

The expenditures during the year were \$50,493.11.  
Balance applicable to interest on bonds, \$57,351.32.  
Tonnage of the work during 1856, 247,307  
Tonnage of the work during 1855, 151,571

Increase, 95,736  
Or 63 per cent.

At the tonnage was of articles of local trade, 79,965  
Coal shipped at Mine Grove, 1856, 43,231  
" " " " 1855, 43,231

Increase during the year, 36,734  
Or 85 per cent.

Amount of bonds issued up to close of the fiscal year, \$2,153,500.

The work earned in 1856, before it was completed, 53 per cent. of the interest.

The enlargement of the Canal from Lebanon to Reading, made excellent progress during the year.

The prospects for trade during the coming year, the Managers consider most flattering.

There are prospects of large shipments of bituminous and semi-bituminous coal, eastward. From the Broad Top, Allegheny, and Farrisville regions alone it is expected that 500,000 tons will be transported during the coming season.

Large shipments of lumber are also expected from the different points on the Susquehanna. At Williamsport, one of many points, 175,000 feet of lumber were cut last year. The coming season, it is thought, the trade will be still heavier.

The Managers anticipate that from all sources the tonnage of this year will be more than double that of 1856, and they infer that the stockholders will have ample reason to be satisfied that the result of the first year's business on the enlarged work.

The report was on motion, approved, and the meeting adjourned to go into an election of officers and a Board of Managers. The following ticket was elected:—

President—R. Rundle Smith.

Managers—Robert B. Davidson, Herman Copo, David Lapsley, William R. White, John Holmes, James Magee, Benjamin T. Curtis, James B. McFarland, J. Rudman Paul, M. D., Charles H. Rogers, Daniel Haddock, Jr., Isaiah Hacker.

Secretary and Treasurer—Oscar Thompson.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r.	When Payable.	Where Payable.	When Due.	Description of Bond.	Name of Company.	Quot of Stock.	L'n'h of Road.	Capital Authorized.	Cap'l paid in.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000 00	6			1860	1st mortgage.	Al x'ndria, Lon. & Hmp'sr		173	5,000,000.00					
498,800 00	7			1862-3	2d "	Androsco'g'n & Kennebec		5455	1,400,000.00			209,475.46	110,246.98	none.
199,000 00	7	July & Jan.			Domestic.	Atlanta and LaGrange..		86.5	1,000,000.00		199,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,046 26	6			now	"	B'n'g'r, Old T. & Milford..		12.5	135,000.00		52,046.26	39,104.40	8,671.61	15,000 in '53
500,000 00	7		N. Y.	1-66	1st mortgage.	Boston & Worcester..		44 5-8	4,500,000.00		500,000.00	1,108,781.90	437,662.03	10,000 4.5m
300,000 00	7			1857-9-62	Income.	Buffalo & State Line..			1,300,000.00					5 pr. ct. 6m.
500,000 00	7			1864	Domestic.	" " "								
577,187 00	6			1872	1st mortgage.	Central Ohio.								
192,200 00	7			1874	2d "	Champl'n & St. Lawrence		43	1,872,000.00	1,001,087.00	162,200.00	77,760.00	10 per ct.	
380,000 00	7				Domestic.	Ch'r'l'te & South Carolina.		110	1,700,000.00		380,000.00	291,219.86	47 per ct.	\$72.300
1,440,000 00	6-7-8		N. Y.	1864-7	1st mortgage.	Ch'go, Burl'ng'n & Quincy.		138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m	
1,300,000 00	8			1868-9	2d "	" " "								
374,000 00	8			1868-76	Convertible.	" " "								
1,500,000 00					1st mortgage.	Chicago, Fulton & Iowa..								
532,000 00					2d "	Cin. Will'ng'n & Zanes'ville		132	1,761,149.16	2,241,500.00	221,491.96			
104,000 00					3d "	" " "								
305,500 00					Income.	" " "								
540,000 00	6			1873	1st mortgage.	Cleveland & Mahoning..		85	1,500,000.00					
400,000 00	7			1864	2d "	" " "								
1,000,000 00	7			1873		Cumberland Valley.....		52	1,218,300.00			160,511.56	81,101.56	\$23,250.24
500,000 00	8			1857-8-9	1st mortgage.	Dayton & Cin. short line.		52	1,000,000.00	1,000,000.00				
350,000 00						Eastern Railroad.....		93 0-10	3,345,900.00			665,578.79	288,007.84	\$234.133
740,000 00	7				1st mortgage.	East Ten. & Virginia..		120	625,450.00			30,897.30	19,692.30	
82,000 00	10			1869	2d "	Essex Railroad.....		20	700,000.00					
400,000 00	7			1861	1st "	Evansville & Crawf'd'vle		109	2,225,637.00			243,970.42	136,061.90	\$133,281.45
200,000 00	10			1864	1st mortgage.	The Fitchburg (Mass.) R.R.			3,540,000.00			681,162.52	213,837.81	3 per cent.
				1876	2d "	Fox River Valley.....		23	800,000.00					
						Fair Haven Branch.....		15	309,000.00			50,381.33	14,232.45	\$166,210.00
100,000 00	6				1st mortgage.	Georgia RR & Banking Co		233	4,156,000.00			1,068,202.50	357,689.42	\$166,210.00
100,000 00	6				2d "	Grt Falls & Conway R.R.		20				27,376.69	14,207.07	
300,000 00	6				1st "	Grt West'n R.R. of Can..		281 1/2	4,191,550.00			2,068,836.00		8 pr. ct.
4,000,000 00	6 1-9			1859-70	1st "	Housatonic Railroad.....		74	2,000,000.00			339,196.50	176,529.98	
2,000,000 00	7			1860	2d "	Hudson River.....		144	4,000,000.00			1,924,382.44	718,037.40	
1,812,000 00	7			1875	3d mortgage.	" " "		144	4,000,000.00					
2,855,000 00	7			1876	1st "	Illinois Central R.R.....		704	17,000,000.00			1,532,117.00	562,221.60	7 pr. ct.
4,115,000 00	6			1860	2d "	" " "		704	17,000,000.00					3 pr. ct.
3,000,000 00	7				1st mortgage.	Indiana Central.....		72 4				354,871.00		
600,000 00	7	Nov. 1.			2d "	" " "								
700,000 00	7	Jan. & July 1		1862	1st "	Iron R.R.....		13	123,700.00					
50,000 00	7				1st mortgage.	Kentucky Cen. 2d Div...			719,500.00					
700,000 00	7					Knoxville & Kentucky..								
						Laurens (S. C.) R.R.....		32	166,000.00			23,233.59	14,233.59	
						Louisville & Nashville..		184						
						Lowell & Lawrence.....		12 35	300,000.00			50,234.71	14,149.13	\$1,000
218,000 00	7			1866	2d "	Mad River & Lake Erie..			2,697,090.00			587,236.57		10 pr. ct.
1,000,000 00	7			1875	2d "	" " "			2,697,090.00					
1,000,000 00	7				1st "	" " "			2,697,090.00					
2,000,000 00	7			1868	1st "	Manchester & Lawrence.		26	1,000,000.00					\$24,000
2,000,000 00	7 and 8			1874	2d "	Marietta & Cincinnati..								
60,000 00	8			1867	1st "	" " "								
420,000 00	8				1st mortgage.	Mexican Gulf R.R.....		27						
329,000 00	8			1881	1st "	Milwaukee & Horicon..		20						
320,000 00	8			1-68	2d "	Mineral Point R.R.....		32						
6,000,000 00	6			1884	1st "	" " "		32						
						Mobile & Ohio.....		497	10,000,000.00			253,498.96	162,502.24	7 pr. ct.
500,000 00	7			1869	1st mortgage.	Nashua & Lowell R.R..		15	600,000.00			191,752.42	55,501.74	7 pr. ct.
2,356,000 00	7			1873	1st mortgage.	New Haven & North'm'n		55	922,500.00					2 pr. ct. 6m
936,000 00	6			1864	2d "	N. Y. & Harlem R.R.....		123	5,717,100.00			1,040,393.26	324,291.57	
411,700 00	7			1863	1st "	" " "								
500,000 00	7				1st "	N. Y. Prov. & Boston..		50	1,508,000.00			245,713.00	64,678.71	\$37,692.30
300,000 00	6				2d "	N. Lon. & William'tu & Pal.		66	1,700,000.00			120,571.50	51,544.40	
						" " "								
						Pontchartrain R.R.....		5	500,000.00					\$25,000
						N. O. Opelob's & Grt West.			6,000,000.00			116,795.00		7 pr. ct.
1,500,000 00	6			1873	1st mortgage.	N. Y. & New Haven.....		62 1/2	3,000,000.00			1,007,666.48	366,118.82	
1,000,000 00	6			1873	2d "	" " "		102 1/2						
2,000,000 00	6			1-85	3d "	" " "								
1,500,000 00	7			1859	1st mortgage.	North Western Va. R.R.								
3,000,000 00	7					Northern (N. Y.) R.R....		118	2,000,000.00			600,000.00		7 pr. ct.
419,300 00	5					North Missouri R.R....		19 2				25,176.74		
221,800 00	6			1877	1st mortgage.	Norwich & Worcester RR		60	2,111,500.00			304,235.33	88,453.56	2 1/2 pr. ct.
				1860	2d "	" " "								
						Ogd'nsh'g. Clay'tn & Rome								
400,000 00	6			1866	1st mortgage.	Ontario, Simcoe & Huron		94				289,690.10		5 pr. ct.
1,500,000 00	7			1875	2d mortgage.	Orange & Alexandria R.R.		83 3	2,937,500.00			276,539.02	137,875.93	
300,000 00	8			1868	1st mortgage.	" " "								
300,000 00	8			1872	1st "	Peoria & Bureau Val. R.R.		47	1,500,000.00					
						Philadelphia & Trenton..		28 1-5	1,000,000.00					6 pr. ct.
350,000 00	7			1861	1st mortgage.	Portsmouth & Concord..		47						
800,000 00	6			1864 to 1874	1st "	Potsdam & Watertown..		76	2,000,000.00					
1,260,000 00	6			20 years.	1st mortgage.	Rutland & Washington..		62 1/2	950,000.00			68,525.42		
						St. Louis & Iron Moun. R.R.		86	6,000,000.00					
						Salem & St. Louis R.R..		168 2	400,000.00					
						Snd'sky Mans'Pd & New-k		116						
						Sullivan Railroad.....		26	500,000.00			75,246.06	19,050.64	
						" " "								
						Tennessee & Alabama..		145				39,586.44	17,378.08	11m. 13 pr. ct
				1861	1st mortgage.	Terre Haute & Richmond		73	1,294,450.00					
				1840	2d "	Toledo, Wabash & Western		242	1,000,000.00					
				1875	3d "	Troy & Boston.....								
						" " "								
						Vicksburg & Jackson....		46						
2,500,000 00	7				1st, 2d, 3d "	Virginia & Tennessee..		215	3,000,000.00			322,048.60	165,276.24	3 pr. ct.
596,600 00	7				1st mortgage.	Westchester (Pa.) R.R..		31	165,000.00					
200,000 00	7				2d "	Wilmington & Manchester		171						
						" " "								
						Winchester & Polomac..		32						
						Worcester & Nashua....		45 60						



## CINCINNATI STOCK SALES.

AT THE STOCK BOARD.

MERCHANTS' EXCHANGE  
AND AT PRIVATE SALE.  
BY HEWSON & HOLMES.

For the week ending March 11, 1857.

## BONDS.

\$5,000 Little Miami R. R. Co. 6 per cent.	
1st Mortgage Bonds.....	80
1,000 Hillsboro' & Cincinnati R. R. Co.,	
7 per cent. 1st Mortgage Bonds....	48
1,000 Columbus & Xenia R. R. Co. 7 per	
cent. Dividend Bonds of '60.....	90
9,000 Covington & Lex. R. R. Co. 7 per	
cent. 2d mort. Bonds.....	67
1,500 Cov. & Lex. R. R. Co. 6 per cent.	
Income Bonds.....	45 and int.
3,000 Marietta and Cincinnati R. R. Co.	
7 per cent. 1st mort. Bonds.....	75
2,000 Ohio & Mississippi R. R. Co. 7 per	
cent. 2d mort. bonds.....	55
1,200 Ohio & Mississippi R. R. Co. Scrip.	27
2,000 Ohio county, Virginia 6 per cent.	
Bonds.....	65
700 Little Miami R. R. Co. Scrip. of	
June, 1856.....	80

## STOCKS.

100 Shares Cincinnati & Chicago.....	2 1/2 and int.
200 " do do 60ds 3 "	
36 " Indianapolis, and Cin.....	65
175 " Peru and Indianapolis.....	9
40 " Little Miami.....	90 1/2
100 " do do.....	91
23 " Columbus & Xenia.....	91
160 " Ohio Central.....	15
15 " Cov. & Lexington.....	20
50 " Marietta & Cincinnati.....	17
456 " Ohio and Mississippi.....	10
22 " Dayton & Western.....	20
30 " Cin. Ham. & Dayton.....	70
10 " Farmers' Bank Ky.....	115

## MONETARY AND COMMERCIAL.

The Stock Market has exhibited no particular change in the past week; prices have, with very slight variations, been well sustained. The money pressure which existed at the close of our last report, is gradually abating; but money is still scarce, and much good paper finds it way into the street at high rates of discount.

The transactions in Little Miami, Columbus and Xenia, and Hamilton and Dayton, have been uniformly at last week's prices. The earnings of the Hamilton and Dayton for February show a very satisfactory increase over the same month of the past year, and are

For February, 1857, - - - -	\$38,705.27
For February, 1856, - - - -	33,143.87

Increase 17 per cent., - - - - \$5,561.40

Indianapolis and Cincinnati shares have improved 1 per cent. on our sales of last week; we note sales at 65, at which rate the market is quiet. We have no report of the earnings of this road for February. The Ohio and Mississippi shares have improved 1 per cent.; with sales as we close at 10c.

In other dead stocks we observe no change.

In Bonds, we report about the usual amount of sales, among which are Little Miami 6s first mortgage, at 80. Columbus and Xenia 7s of 60 at 90. Covington and Lexington 7s, second mortgages, at 67. Marietta and Cincinnati, first mortgages, at 75.

Exchange on New York has been in more active demand, and rates have advanced @ 1/4, with sales of Banker's Checks at 1 per cent. premium. New Orleans Exchange in less demand, with moderate sales at 1/2 per cent. premium.

## Sonora Exploring and Mining Co.

AS AGENT for the above Company, I offer for sale a limited amount of the stock of the Company for a short time only.

Maps, plans and other information can be seen at my office, corner of Third and Walnut streets. Odd Fellows' Building, Cincinnati, Ohio.

feb 12

EDGAR CONKLING.

## CONSULTING ENGINEER.

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

Je4

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS &amp; NIXON,

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush,  
Printed & Unent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Emameled Cloth, for seats & backs of Cars;

ROPE MATTING, Every Width;

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING.

N. B. We have the Plush in bond for exportation  
sep 18 DOREMUS & NIXON.

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,

aug 14-1y

President of the Board.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

feb 19-1m

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by

July 31

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

## THOMAS D. STETSON,

## Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions.

oc 23

## To Railroad Contractors.

McMINNVILLE, Tenn., Jan. 18, 1857.

SEALED PROPOSALS will be received at McMinnville until March 16th, 1857, for the grading, masonry and bridging on sixty miles of the South Western Railroad, commencing at McMinnville, the southern terminus, and running north through Warren, White and Putnam counties, to Livingston, in Overton.

The character of the work is heavy, comprising a large amount of rock excavation, several heavy jobs of bridge masonry, and 1200 lineal feet of Howe's or MacCallum's bridging.

Proposals for the above work may be made by sections of one mile each; or for thirty, or the whole sixty miles, including iron, track-laying, depot buildings, and all the equipment necessary for operating the road when complete.

Plans, maps, profiles and specifications may be seen, and all other information obtained, at the Engineer's Office, after March 1st, at McMinnville; or before that time, by addressing me, at the Engineer's Office of the M. & O. R. R., Jackson, Tenn.

ROBERT STERLING,

Engineer in Charge.

feb 12

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

## RAILWAY AGENTS

AND

## COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb 5-1y

## RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

feb 5-1y

THEODORE DEHON,  
10 Wall st., near Broadway, New York.

## SAFETY &amp; ECONOMY.

JAMES HARRISON JR'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point for which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

dec 11

JAMES HARRISON, Jr.,  
Second avenue, corner of 2d street, N. Y.

T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,

N. W. Cor. 5th &amp; Walnut sts.,

CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR

RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

dec. 11

GRAY, HEMMINGRAY & BROTHERS,  
No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

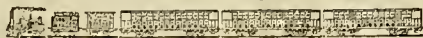
BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

jan 8 1y

MIDDLETON, WALLACE & CO.,  
119 Walnut st., Odd Fellows' Bull



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12:30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

ON THURSDAY, Aug. 14th, The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago. Trains will leave Clinton at 6:30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton

A Steamer leaves Racine for Chicago every evening at 10:30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Ass't Sup't. aug14

## Harlan & Hollingsworth,

WILMINGTON, DELAWARE.



### Manufacturers of all kinds of Railroad MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE F. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## WASON'S CAR MANUFACTORY,

Near the Pittsburgh R. R. Shops,  
CLEVELAND, OHIO.

Passenger, Baggage, Freight, Dumpers,  
Hand Cars, &c.,

Of the best quality in all respects, style, workmanship and material, made to order with promptness. Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

CHARLES WASON,  
Late of the firm of T. & E. Wason, Springfield,  
Massachusetts.  
Feb 20

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrels, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
Feb 7 LEE & LEAVITT.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.

## PRATT & FREEMAN.

### PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,

PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps.

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Chucks and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Bull's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-1y

## E. MENDENHALL,

MAP, BOOK & PRINT SELLER,

Has constantly on hand GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES, DRAWING INSTRUMENTS, &c.

Publisher of the

### Railway Map of the Western States,

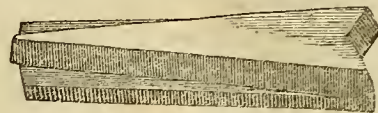
In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF Ohio the LARGE MAPS OF CINCINNATI, and HAMILTON Co. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

### MAPS OF EVERY DESCRIPTION.

mh28

## Important to Railroad Companies, etc.



### Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

### RAILROAD FROG-POINTS,

Lathe Mandrels, Gages

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

### ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOY'S

METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK,

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer, New 64 Broadway, N. Y.

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mar1-1y

## GREAT WESTERN Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Feb 25

CORBY, GOSSIN & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street, No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent.

Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

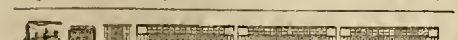
## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati). Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK, Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

oc23-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS, To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jyl7

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

Freight—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Om nibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Om nibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

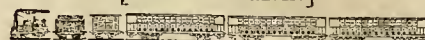
Ag't Cin. and St. Louis Omnibus L. Office No. 2 Burnet House.

jan2

1856.

1856. Winter Arrangement. 1856

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST.

## FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

## NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Springfield for Columbus; at Urbana with Columbus and Piqua trains East and West; at Bellefontaine for Crestline, Pittsburgh, Philadelphia; at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities.

Same train connects at Dayton for Dayton & Michigan Road to Troy, Piqua, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 5:40 A. M., and Chicago 2:00 P. M. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

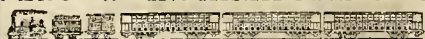
Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M.

For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

HENRY O. AMES, Sup't.

The Omnibuses will call for passengers by leaving their names; either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East, arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M., for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash, and Western Road for Lago, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R., make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

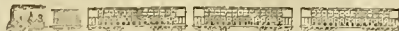
L. N. ANDREWS, Gen. Frigh't Ag't. Indianapolis, Sept. 16, 1856.

[mh20-1y.



## KENTUCKY LOCOMOTIVE WORKS

CORNER OF KENTUCKY AND TENTH STS.  
LOUISVILLE, KY.



THE Proprietors of the Kentucky Locomotive Works would respectfully inform Railroad Companies and the public generally that, having completed their establishment, they are now prepared to receive and execute orders with fidelity and dispatch.

They will contract for

**Locomotives, Passenger, Baggage, Freight, Gravel and Hand Cars,**

Of every style and pattern, as well as all kinds of Stock and Machinery required for railroads.

Particular attention will be paid to repairing, for which they have every facility.

They are also prepared to contract on favorable terms for building all kinds of Machine Tools, such as Turning Engines, Lathes, Planers, Drills, Slotting, Splitting, and Shaping Machines, of every variety of pattern.

Having also a large FOUNDRY connected with the establishment, orders for Castings are solicited, and will be filled with promptness.

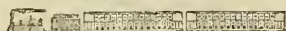
Car Wheels of any pattern can be furnished on short notice. Double and single plate and Spoke Wheels of all sizes constantly on hand.

Communications or orders must be addressed to

OLMSTED, TENNY & PECK,

je. 8-17 Louisville, Ky.

## Norris' Locomotive Works



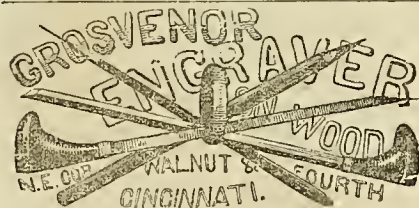
PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

Richard Norris & Son.



## Prosser's Patent LAP-WELDED

## IRON BOILER TUBES,

Every article necessary to

### DRILL THE TUBE-PLATES

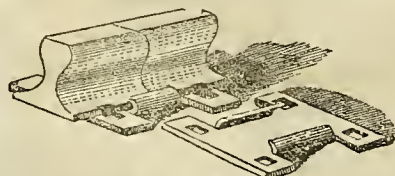
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whistle Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Ties, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**

82 PLATT STREET, New York.

## RAILROAD SPIKES.



### WROUGHT IRON

## Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch.

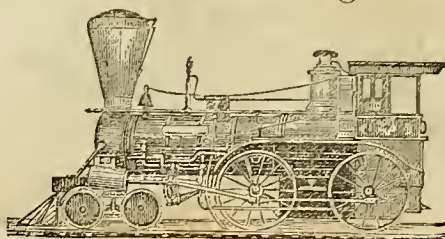
J. HOPKINSON SMITH,

No. 25, South Charles St.

Please direct the name in full.

Baltimore August 31-1

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.

Feb. 13 1855 6m.

## RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.

New York, Ap 3, 1855. 9 South William Street.

## A. B. LATTAS

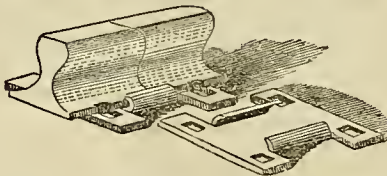
### Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

apl7 A. B. & E. LATTAS.  
J. D. GREEN, C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal, CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract for favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

J. B. GREEN & BRO.

Feb. 14 1y.

## THE SCHENCK MACHINERY DEPOT

AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

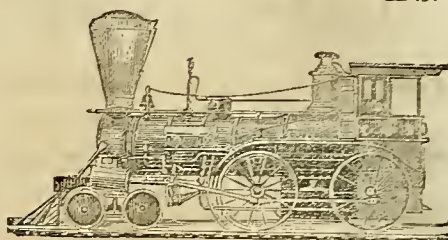
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



THE undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap. 20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers, Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws;

### LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car, Hand, and Signal Lanterns.

### Cotton Duck for Car Covering,

Of any required width to 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks. Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver Plated Trimings for Windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russia, and Italian. Conditors Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other Articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers.

Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass

to c6

## GEO. D. WINCHELL & BRO.,

172 Elm Street, between 4th & 5th,

CINCINNATI, O.,

Sole Manufacturers of McGowan's Double Action SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855 1



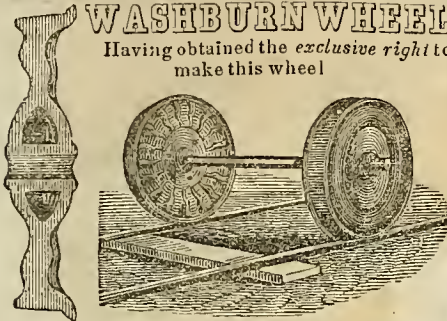
**FULTON CAR WORKS,**

CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

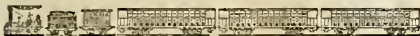
**WASHBURN WHEEL**

Having obtained the exclusive right to make this wheel



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Joins and Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

**MUSKINGUM WORKS**  
ZANESVILLE, OHIO.**DOUGLASS, SMITH & CO.**

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

**CAR WHEEL.**

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

**WASHBURN WHEEL,**

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

**DAVENPORT, RUSSELL & CO.,****Railway Car Manufacturers,**  
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* **JOSEPH DAVENPORT.**

**S. C. THOMSON & CO**  
MANUFACTURERS OF**PATENT PAD LOCKS,**

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n24 NEWARK, N. J.

**ALBERT M. SMITH'S**  
**PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT**

For a Night and Day High or Low-back Seat, combined in one,

PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-1y 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

**ALBERT M. LEA,**  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS.  
190 Water Street New York.

**RAILROAD MAP OF UNITED STATES**  
NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

**IRON BOILER FLUES**  
PASCAL IRON WORKS.**MORRIS, TASKER & CO.,**  
Manufacturers of

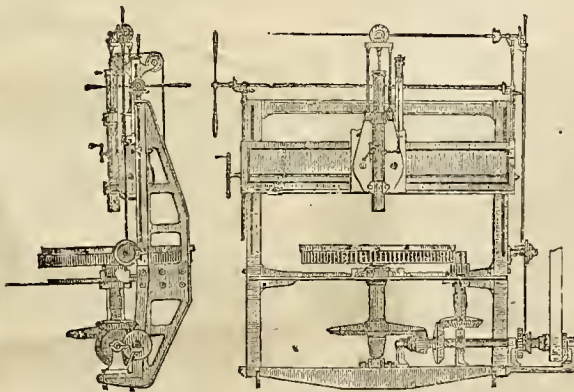
**LAP-WELDED BOILER FLUES,**  
1 1/2 to 7 inches outside diameter, cut to definite lengths as required.

**WROUGHT IRON WELDED TUBES,**  
From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

**Warehouse, 85 South Third St.,**  
PHILADELPHIA.

**NILES' WORKS.****FOUNDERS AND MACHINISTS,**

EAST FRONT STREET, CINCINNATI,

**TYRE LATHES,**  
Of the most approved plan.**HORIZONTAL**  
**FACE PLATE LATHES,**

OF VARIOUS SIZES, TO SWING  
From 40 inches, to 12 feet.

**PLANING MACHINES**  
LARGE & SMALL.**MARINE & STATIONARY ENGINES.**

BOILERS OF EVERY DESCRIPTION.

**HEAVY FORGINGS,**

IRON AND BRASS CASTINGS, &c., &c.



**Parry's Anti-Friction Box,**

PATENTED IN 1853.

THE attention of the public is directed to this invention, for which patents have been granted by the United States, England, France and Belgium—it is designed to relieve all species of pivot or end friction, and is especially adapted to receiving the thrust of propeller shafts, pivots for railway turn tables, steps for turbine wheels, mill stones, center plates for eight wheel cars, steps for heavy mill shafting, and for all kinds of presses where the power is received by the application of a screw, the gain of power by the adoption of this box is immense.

Contracts will be taken for erecting Railway Turn-Tables, (which will cost no more than a wooden structure), and their durability will be guaranteed for twenty years without repairs.

Applications will be received for the sale of State Rights for the use of this invention.

For further information, apply to

JOHN RICE & CO., Patentees.

50 South Fourth street, Philadelphia.

READ THE FOLLOWING CERTIFICATES.

OFFICE OF THE PENNSYLVANIA CENTRAL R. R.,  
PHILADELPHIA, June 9th, 1855.

MR. PARRY—

DEAR SIR:—We have your Anti-Friction Pivot in use under Turning Tables, on this Road. They require no gearing or machinery, but simply the strength of one person to turn them when loaded with engine and tender. I should judge they will last for years without repair—an important item in such structures.

Yours respectfully, J. EDGAR THOMPSON,

Civil Engineer and President.

I fully concur in the above and foregoing statement, having examined the Turn-Table and witnessed its operation

WILLIAM B. FOSTER, Jr.,

Civil Engineer.

SUPERINTENDENT'S OFFICE.

TRANSPORTATION DEPARTMENT, PENN. R. R.,  
ALTOONA, Blah Co., Pa., Nov. 11, 1854.

MR. PARRY—

DEAR SIR:—The Turn-Table in the new engine house at Altoona is constructed of boiler plate, and is fifty feet in diameter. The center bearing is an application of your Improved Anti-Friction Box, and thus far has given evidence that it is all that its proprietor claims for it—the very best center bearing that can be found on that purpose.

Very respectfully,

H. J. LOMBAERT, Superintendent.

ENGINEER DEPARTMENT, NORTH P. A. R. R.,  
PHILADELPHIA, Feb. 10, 1855.

I am so well satisfied of the excellency of Parry's Anti-Friction box, that I have purchased for the North Pennsylvania Railroad Company the right to use it, and Messrs. Bancroft & Sellers are now building two locomotive engine turn-tables of cast iron for me, one of twenty-five feet, and one of forty seven and a half feet diameter, to which these boxes are to be applied. I have no doubt whatever that the invention is a very valuable one, and it is simple and not liable to get out of order.

EDWARD MILLER, Chief Engineer.

READING, June 2, 1853.

There are two sets of the above rollers in use on the Philadelphia and Reading Railroad; one under a heavy twenty-five foot iron turning platform, for large locomotive engines, and the other under a six ton crane.

Both have been in operation for some time, and have proved satisfactory; moving with less friction than any other plan of bearing which I have seen, and requiring no repairs and very little grease or oil.

I consider them a most useful inventions; as greatly decreasing friction on all heavy bearings for either vertical or horizontal shafting machinery.

Signed,

G. A. NICHOLS,

Engineer and Superintendent Philadelphia and Reading Railroad.

BORDENTOWN, N. J., Nov. 22, 1854.

In July, 1853, I attached Parry's Anti-Friction Box to the shafts of steam propeller Amboy; it receives the back and forward thrust of the wheels, each eleven feet in diameter. I am convinced, by thorough practice, that it is the best thrust bearing that can be used; it does not heat or corrode, requires very little oil, and I think a decided gain in power or usefulness, over any rubbing surface that may be sufficient to resist the pressure of the forward thrust of a propeller shaft.

ROBERT ALLEN,

Superintendent of Steamboats for Camden and Amboy Railroad Company.

PHILADELPHIA, February 19, 1855.

Geo. T. Parry, Esq.—Dear Sir:—I have examined your Anti-Friction Box for its application more particularly to the purpose of turn table pivots, as well as steps for upright shafts, and difficult as it is to demonstrate as to the perfection of its working, I find its practical applications to be nearer to what has been long desired and sought than anything heretofore offered for such purposes. Great difficulty has ever existed with turntables in obtaining a pivot that would give freedom of motion without constant attention and adjustment, and even with the most approved, expensive gearing has been rendered necessary.

The table twenty-four feet in diameter, made by Bancroft & Sellers, of this city, being balanced on its center, I found it required my entire weight on the extremity of one of its arms to destroy its equipoise, while with the power of my little finger I could turn it horizontally upon your box. I therefore take pleasure in recommending its use, as the most perfect pivot and step that has ever been presented to the public.

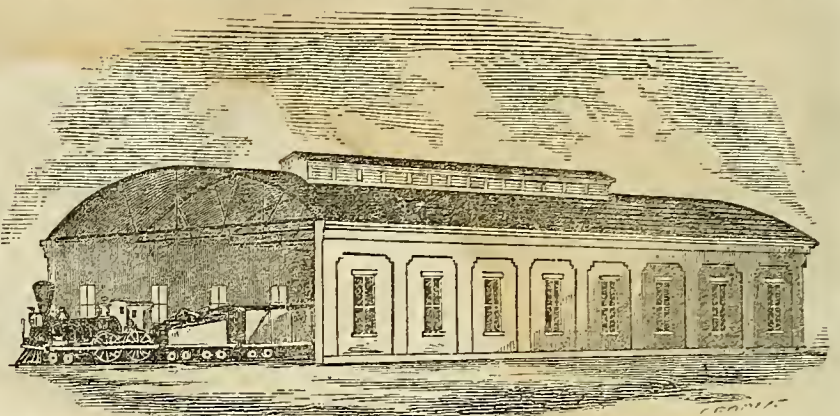
Very respectfully,

STRICKLAND KNEASS, Civil Engineer.

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



Office, No. 57 West Third Street,  
CINCINNATI, OHIO.

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of iron supporting now in use, and no more than good wooden trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

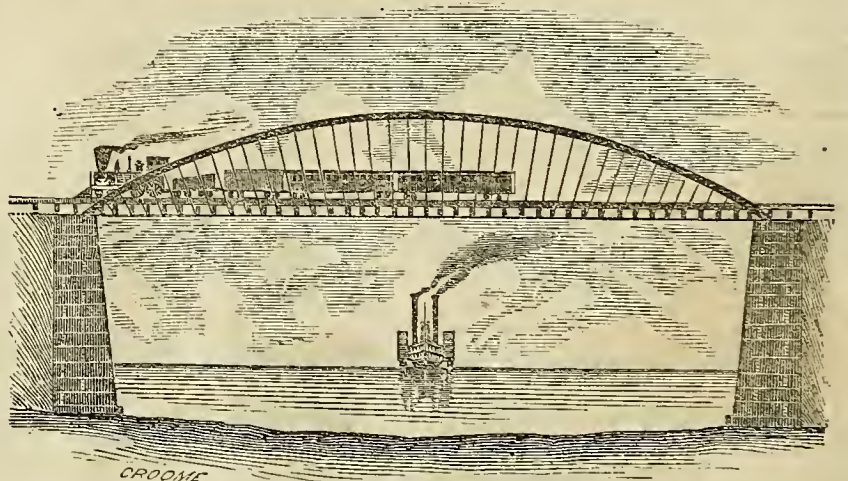
MOSELEY, WINSTON & MOSELEY.

January 1st, 1856.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *plate iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by responsible obligations.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

THOS. W. H. MOSELEY.

Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - Editor.  
W. WRIGHTSON, Associate Editor.

CINCINNATI:

THURSDAY MORNING,.....MARCH 19, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.  
Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers, and Proprietors,

### CONTENTS.—No. 4.

#### EDITORIAL.

The Ohio Valley Arterial Railroad.....	49
Our Course.....	49
Journal of the Franklin Institute.....	49
Banker's Magazine.....	49
Frightful Accident on the Great Western Railway, Ca.....	50
Sonora Exploring and Mining Company.....	50
Southern Pacific R. R.....	50

#### RAILROAD DAQUERREOTYPES.

Virginia & Tennessee R. R.....	51
Wilmington & Manchester R. R.....	51

#### MISCELLANEOUS.

Pennsylvania R. R.....	51
Lake Erie & Michigan Transit Ship Canal.....	53
Sonora Exploring and Mining Company.....	54
Pennsylvania—The Canals and Railroads of the State.....	55
The Ocean Telegraph.....	56
Past and Present.....	57

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	58
Cincinnati Stock Sales.....	59
Monetary and Commercial.....	59
Sales at the New York Stock Board.....	59

#### JOURNAL OF THE FRANKLIN INSTITUTE.—

For the information of a correspondent, we would state that the *Journal of the Franklin Institute* is the oldest periodical in the United States devoted to the spread of information on subjects connected with the Mechanic and Manufacturing Arts. It is a well-conducted and reliable journal, and is well worthy the patronage of the scientific as well as the mechanical reader. It is published monthly at the rooms of the Franklin Institute, in Philadelphia—Wm. Hamilton, Actuary. Subscription \$5.

THE BANKER'S MAGAZINE for March is received, and has the following table of contents: "Commercial Statistics of the United States; Manual of Notaries Public; Bank Statistics; Finances of the State of Ohio; Financial events in Europe during the year 1856; Foreign Items; Miscellaneous; Monthly Table of Government and State Loans, for the month of January, Railroad Shares and Bonds, City and County Bonds, and Miscellaneous Securities; Bank Items; Notes on the Money Market of New York for the month of February.

#### THE OHIO VALLEY ARTERIAL RAILROAD.

Whoever has looked upon the map of the United States, must have observed a geographical phenomenon of great value and importance to the locomotion, and even the prosperity, of the country. This fact is, that at a point nearly central to the Mississippi valley a great river (the Ohio) has its stream and valley very nearly in an easterly direction; and from the same point another valley (that of the Missouri) lies in a westerly direction. These two valleys make, in a direct line, about two thousand miles, and span the entire valley. On the east, also, the valley of the Potomac connects with that of the Ohio; so that from the Atlantic to the Rocky Mountains there is a natural route for a great arterial railroad, crossing the entire valley of the Mississippi. Nor is this all—as this route lies in broad and fertile valleys, except at the single point where it crosses the Alleghenies, it is obvious that this route must contain all the resources, whether of population or products, which can contribute to the support and profit of a railroad. Accordingly, we find at one end the city of Baltimore; in the valley of the Ohio, Cincinnati and Louisville; and in the valley of the Missouri, St. Louis. As the general courses of the streams to which we refer are east and west, so these cities are on nearly the same line of latitude. These cities contain at this moment an aggregate of *six hundred thousand* inhabitants; but they are only types and representatives of the fertile regions around them. The valley of the Potomac is proverbially productive, and the valley of the Ohio is the richest portion of the United States.

It was in view of these extraordinary circumstances that the first considerable railroad attempted in the United States was located in the valley of the Potomac—the *Baltimore and Ohio*. It is a quarter of a century since this was first undertaken, and it is but just now completed to the original point—Parkersburg, on the Ohio. But what was then contemplated is but a fragment of what has since been planned, and is now about to be completed. In a few days, we learn, the opening of the entire line of the *Marietta Road* on one side of Cincinnati, and of the *Ohio and Mississippi* on the other, may be expected. The former of these lines connects Cincinnati with the Baltimore Road, at Parkersburg, and the latter connects Cincinnati with St. Louis. These are the links in what we regard as the grandest and most important railroad in America. It will be composed of the following parts, viz:

	Miles.
Baltimore & Ohio, with the North Western R. R.....	360
Cincinnati & Marietta.....	190
Ohio & Mississippi.....	340
Missouri Pacific.....	260

Aggregate.....1,170

Nearly twelve hundred miles of continuous railroad, lying in the most fertile valleys of

America, will connect the Atlantic seaboard with the capital of Missouri. The change produced between this result and what existed at the commencement of the *Baltimore and Ohio* is immense and wonderful. With the best of steamboat navigation, the result was as follows:

	Distance.	Time.
Baltimore to Wheeling, by stage.....	360 miles.	3 days.
Wheeling to Cincinnati.....	260 "	2 "
Cincinnati to St. Louis (river).....	700 "	6 "
Aggregate.....	1,320 "	11 "
By rail.....	1,170 "	3 "
Expense, old route.....		\$60 00
Expense, by rail.....		25 00

Thus we find in *time two-thirds* saved, and in *money one-half*. Estimating time at its proper value to a business man, and the entire saving is *four-fifths* its former cost!

In another point of view, this route is still more important. It is the great ARTERIAL LINE of the American system. It lies nearly on the central line of the representative population, and in the most favorable line of latitude for production. Thus it is the very locality for a Grand National Highway, on which the products of the nation may move east and west. As *that* is the great line of movement in the United States, we may reasonably conjecture that the business of this line will be proportionably great. Indeed, the immense business of the Baltimore and Ohio Railroad, without the completion of its western connections, demonstrates most confidently that this must be the case.

It is quite evident that the views of the most sanguine friends of this great line must ultimately be realized. This line will, to a large extent, occupy the place of the river itself; while it must increase the business which the river would have done ten-fold. The rapidity with which all portions of the east and west may thus be connected will also radiate business to and from all adjoining regions, and make it the Great Central Highway.

#### OUR COURSE.

We have always aimed to make our course an independent one, and to do right regardless of the results. Whoever aims to do this must expect to encounter the prejudices of some and to please others. The ill will is always expressed—the good will sometimes; and that renders such letters as the following all the more agreeable. We thank our correspondent for his kind expressions toward us, and beg leave to assure him that we shall endeavor to merit them:

"ED. R. R. RECORD—*Dear Sir:* I have taken the *Railroad Record* since the 1st of January last, and have derived so much valuable information from it, and have also been for the most part so well pleased with its manly tone and sentiments, that I wish to continue it for the year to come. Our railroad interest is one of the largest in the coun-



try, and I would encourage whatever has an influence to enlighten public sentiment, and to perfect this vast interest.

"I am particularly pleased with your efforts to bring out fully to the light, the condition of all our roads, and to make the managers of them feel their obligations to conduct all their affairs in such a manner as to stand the test of the most perfect exposure. Economy, high integrity, and a frequent and full report of their acts and condition, are essential to confidence on the part of the public, and are due to all persons who are interested, as holders of stock or of bonds. Roads that keep their affairs in the dark are not worthy of confidence.

"One great fault in the management of our roads is that they do not close up their construction accounts, and then make their yearly earnings pay their yearly expenses.

"Another great fault with many otherwise excellent roads is that they do not attend to their own affairs, and keep themselves unencumbered by outside alliances and obligations.

"Still another fault—yea gross fault—is, that many of our roads suffer their bonds to become comparatively worthless, by running so in advance of their abilities to meet their engagements. No road should create bonds faster than it increases its ability to pay the interest promptly, and to redeem the bonds themselves at maturity. To say this is only to say, in other words, that they should be honest.

"You are on 'the right track'; 'go ahead.'

"Enclosed you will find *three dollars*, the subscription price for the year to come."

#### FRIGHTFUL ACCIDENT ON THE GREAT WESTERN RAILWAY, CA.

The train which left Toronto for Hamilton on the afternoon of March 12th, met with the most frightful accident that we have ever been called to record, in the history of railroading. The scene of the disaster was at the bridge over the Des Jardines Canal. The bridge is a swing bridge elevated some sixty feet above the water. As the train passed, the locomotive and tender are supposed to have met with some obstruction sufficient to cause a rebound. This threw the whole train from the bridge, and buried the unfortunate passengers in a heap of ruins. Up to the evening of March 13th, fifty-seven bodies had been recovered. Among the killed are many gentlemen whose positions in society render their loss a public calamity. Samuel Zimmerman and Mr. Street of Niagara Falls; Isaac Buchanan of Hamilton, Vice President of the road; Capt. Twoley of the Lake Ontario steamers, and others well known, are among the killed. Mr. Brydges, the managing director of the road, is among the injured.

It is seldom that an accident of such horrible fatality occurs, but within the past two years there have been several, which, by their terrible fatality, have startled and alarmed the

community. To say that such accidents are the results of carelessness, is true. They are the legitimate consequences of the most gross and criminal negligence and dereliction of duty, and never would occur if either the road or the running arrangements were not shockingly out of order. In the accident in point, where a train is to cross a swing bridge at an elevation of sixty feet, the employment of a speed that could give rise to such an accident is utterly indefensible, and more, is criminal, and should be punished as such by the authorities of the road, and in case of their failure, by the civil authorities. But, as there is to be a legal investigation, we refrain from further comments.

#### SOUTHERN PACIFIC R. R.

We learn from the *Harrison Flag*, of February 21, that on Monday, February 16, the editor of that paper, in company with several gentlemen, went to inspect the first ten miles of railroad graded and furnished with cross-ties, according to the charter of the company. The ten miles are graded, and the cross-ties, mostly of post oak, are there, and are said to be substantial. 'The whole work is done in a permanent and satisfactory manner, and reflects great credit on the contractors. It is due to Cincinnati to say that she has furnished more substantial aid to this great enterprise than any other part of the Union. It was Ohio that furnished the enterprising gentlemen who assumed the responsibility of carrying forward the work at a time when no one else would give a passing thought to this great project; and to Ohio it is due that the company has thus been able to fulfil the requirements of their charter, and save from forfeiture one of the most liberal charters ever granted by a Legislature. And yet Ohio has not a single representative in the Board of Directors which control this road. How long the people of Ohio will be willing tamely to submit to this remains to be seen. For ourselves, we unhesitatingly say it is an outrage on justice and courtesy.

We however congratulate the company on the present position of the work, and trust that the Messrs. Brown will reap an abundant reward for the energy and enterprise which they have displayed in pushing forward the work.

#### SONORA EXPLORING AND MINING CO.

Our readers will find in another portion of this paper the first Annual Report of this Company, made March 16th, 1857. From this we learn that the exploring party sent out by this Company a year ago, have been eminently successful. They hold secure possession of the old SALERO and OJERO mines, and twenty-two new veins of silver ore in the Santa Rita mountains, near Tubac, and have just received the title deeds to the famous Arivaca Rancho, celebrated in the days of Spanish rule for the richness and number of its silver mines. Twenty-

five of these are known to exist within the boundaries of this Rancho, any one of which would be a great acquisition to the Company.

The ruins of its old missions, the glowing accounts given by travelers and historians of the wealth of its silver mines, and the sufferings of this territory, for the past one hundred years, from the Apache Indians, render the Gadsden purchase an interesting region. Here are some of the finest Mission buildings ever built in this country by the Spanish Jesuits. That of Tumacacari, three miles south of Tubac, the head-quarters of this Company, would do credit to more modern architects, and demonstrates that this locality was considered an important one by these intelligent and shrewd ecclesiastics. The silver veins which have given to Mexico its wealth, here crop out on the surface, and in former days munificently repaid the labors of the miner. They are profitable from the very outset. The rich ranches of this region lying in green, fertile and refreshing spots among mountains, of mineral deposits, possess in themselves no mean value. That of Arivaca has ample room for *sixty thousand* head of cattle, and wood, grass and water sufficient for all purposes.

Much interesting information concerning this region, is contained in the last chapter of a work entitled "Mexico and its Religion, by Wilson," to which the reader may refer for conformation of the statements of this Company in their report.

The enterprise is well worth the attention of our readers, and we trust will amply repay the Company for its energy and perseverance.

☞ The aggregate capital of the Banks in Massachusetts is as follows:

In the city of Boston.....	\$31,960,000
Out of " " .....	26,831,656
Total.....	\$58,791,656

The average amount of loans and discounts is as follows:

In Boston.....	\$52,796,404
Out of Boston.....	47,139,814
	\$99,936,218

The specie kept in bank is as follows:

In Boston.....	\$2,879,160
Out of Boston.....	1,073,351
	\$3,953,111

The circulation is as follows:

In Boston.....	\$ 7,160,064
Out of Boston.....	15,881,940
	\$23,042,004

It will thus be seen that the circulation of the Banks in the city of Boston is much less than that of the Banks out of Boston, and that the proportion of specie in the city Banks is much greater than in those in the country. The proportion of specie in the city Banks to their circulation is more than one-third, while that in the country Banks is not one-twelfth. This shows the relative advantages of city and country for the location of a Bank of issue.



The Mobile papers have published a long report from the Engineer of the Mobile and Ohio Railroad, from which we learn that, completed to Jackson, and a connection formed by steamer with Cairo, it will, with the Tennessee Central and Memphis and Charleston Railroad, form a continuous line, reducing the time between Memphis and Cairo about twenty hours. This will be more rapid than the present route through the Eastern cities to the North, and will induce a heavy travel, and the equipment should be ordered to be delivered next fall. Summing up, then, the Mobile and Ohio Railroad is in successful operation for 197½ miles, the net earnings of which, without being extended, will be sufficient this year to pay operating expenses, and the interest on all the debt already incurred and required to be contracted for the extension to Okolona and Columbus from the South, and to Jackson from the North.

## Railroad Daguerreotypes.

### No. LX.

#### VIRGINIA & TENNESSEE R. R.

The report of this company is dated November 25, 1856. The following are its officers:

President—J. ROBIN McDANIEL, Lynchburg, Va.

Treasurer—F. G. MORRISON, Lynchburg, Va.

Secretary—W. H. HUOHES, "

Gen. Superintendent—E. H. GILL, "

#### DIRECTORS.

THOS. L. PRESTON,  
WILLIAM A. READ,  
DEXTER OTEY,  
HENRY DAVIS,  
JOHN M. PRESTON.

The ANNUAL MEETING of the stockholders is held on Wednesday following second Monday in September.

The CAPITAL STOCK is as follows:

Price per share.....\$100.  
Capital.....\$3,000,000.

The DEBTS of the road are:

1st, 2d and 3d mortg.....\$2,500,000.

#### RUNNING EQUIPMENTS.

Number of Locomotives.23.  
Passenger cars.....13.  
Baggage " ..... 6.

The following are the results of operation for the years 1855 and 1856. Fiscal year ends September, 30th:

#### RECEIPTS.

	1855.	1856.
Passengers.....	\$ 97,128 90	\$115,473 99
Freight .....	149,915 62	188,349 15
Mails.....	7,548 94	16,077 68
Express .....	1,326 79	2,147 78

Total .....	\$255,920 25	\$322,048 60
Cost of operation.....	129,590 85	156,972 56

#### DETAILS OF CONSTRUCTION.

Length of main line.....204 miles.  
Branch.....10 "  
Termini.....Lynchburg and Bristol.  
Gauge.....5 feet.  
Length of rail bars.....16 to 24 feet.  
Weight per yard.....60 lbs.  
Kind of iron.....English.  
When laid.....In last 5 years.  
Kind of rail.....T.  
Ties.....White Oak and Chesnut.  
Length.....8 feet.  
Size.....6 by 8 inches.  
Fuel.....Wood.

This road was not completed till the first day

of October last, and may be regarded as new. yet. A line of telegraph is being constructed

### No. LXI.

#### WILMINGTON & MANCHESTER R. R.

The report of this company is dated November 27, 1856. The following are its officers.

President—THOS. D. WALKER, Wilmington.

Treasurer—JOS. J. LING, "

Secretary—WM. S. WALKER, "

Superintendent—JAS. P. ROBERTSON, "

#### DIRECTORS.

W. W. HARBLEF, S. C.  
G. J. W. MCCALL, "  
W. A. MALBRON, "  
JNO. B. MOORE, "  
E. W. CHARLES, "  
J. ELI GREGG, "  
N. N. NIXON, N. C.  
HENRY NUTT, "  
JNO. A. TAYLOR, "  
ALFRED SMITH, "

The ANNUAL MEETING of the stockholders is held on the Thursday after the third Monday in November.

The CAPITAL STOCK is as follows:

Capital paid in.....\$1,115,401 95.  
Price per share.....\$100.

The DEBTS of the road are:

1st mortgage.....	\$596,000.
Interest.....	7 per cent.
When due.....	1st June and 1st Dec.
2d mortgage.....	\$200,000.
Interest.....	7 per cent.
When due.....	1st May and 1st Nov.
Income.....	\$197,000.
Interest.....	7 per cent.
When due.....	1st March and 1st Sept.
Bonds secured by Wil.	
& Weldon R. R. stock.....	\$150,000.
Interest.....	7 per cent.
When due.....	1st May and 1st Nov.
Floating debt.....	\$204,064 52.
Total debt.....	\$1,347,064 52.

#### RUNNING EQUIPMENTS.

Number of Locomotives..20.  
Passenger cars, 1st class12.  
" " 2d " 4.  
Baggage " ..... 6.  
Express " ..... 6.  
Mail " ..... 6.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends Dec. 1:

#### RECEIPTS.

	1854.	1855.	1856, 10 mos.
Passengers.....	\$205,359 98	227,690 03	208,483 09
Freight and minor sources.....	94,949 11	142,155 50	100,550 50
Mails.....	30,090 27	49,220 69	35,603 01
	\$330,399 36	419,075 22	344,636 60
Cost of operation.....	\$188,736 72	176,089 64	238,713 97

#### DETAILS OF CONSTRUCTION.

Length of road.....171 miles.  
Termini.....Wilmington&Kingsville  
Gauge.....5 feet.  
Single track.....171 miles.  
Sidings.....10 "  
Weight per yard, rail.....51 lbs.  
Kind of Iron.....English.  
When laid.....Finished 1853.  
Kind of rail.....T.  
Length of rail.....16 and 18 feet.  
Ties.....Cypress and Pitch Pine.  
Length.....8 feet.  
Size.....7 by 9 inches.  
Fuel.....Light wood & dry Pine.  
Telegraph on road.

## Railroads.

### PENNSYLVANIA R. R.—TENTH ANNUAL REPORT

*Of the Board of Directors of the Pennsylvania Railroad Co., Feb. 2, 1857.*

OFFICE OF THE PENNSYLVANIA R. R. Co.,  
Philadelphia, Jan. 31, 1857. }

*To the Stockholders of the Pennsylvania Railroad Company:*—In conformity with the requirements of the charter of the company, the Board of Directors submit for your information their report for the year 1856.

The work upon the second track has been continued during the year, and 14 miles of the same laid down, making the whole amount of second track completed, at the close of the year, 150 miles, besides about 20 miles of sidings, or third track.

The company has on hand iron rails sufficient for 12 miles, which will be placed on the second track during the year 1857.

It will require to complete a double line for the whole road, and erect the additional station houses on the line of our road, the further sum of \$1,000,000.

The facilities of the company for the transaction of a large freight business have been increased during the past season by the addition of extensive sidings, and the erection of permanent warehouses at Lancaster, Newport, Perrysville, Altoona, Greensburg and Indiana. Additional warehouse room is urgently required to meet the demands of the increasing business at Johnstown, and at some other points on the line of the road.

A general passenger station, for the accommodation of our own road and the western railroads centering at Pittsburg, is much needed at that city. Ample grounds have been purchased by this company for the purpose, but the erection of a commodious station house has been postponed, awaiting the result of efforts now being made by the companies west of Pittsburg to extend their lines into the city.

The branch road from Blairsville to Indiana was opened for use early in the year. Its length is 16½ miles, making the entire length from the point of intersection with the main line to the borough of Indiana, nineteen miles. This extension (from Blairsville to Indiana) cost \$310,000—exceeding materially the estimates of the engineers; but it is believed that the additional business it will be the means of attracting to the main road will compensate for the outlay. The equipment of the road has been adequate to the transportation of all the freight and passengers offered at the most busy and pressing period of the past year. That of the freight department is deemed sufficient to meet the demands of any general business that the existing restrictions imposed by State legislation will permit the company to transact with profit. The Board take this occasion to remark that unless the tonnage passing over the Pennsylvania R. R. is placed upon the same footing as that of other roads in the Commonwealth, this improvement (in consequence of the increased facilities recently opened by rival lines) will fail to influence the course of trade to the extent which its friends and projectors anticipated. Nearly one-half of the stock of the company is owned by the city of Philadelphia and the county of Allegheny, and it is to the citizens of these communities that we especially address ourselves, as those most deeply int-



erected—not so much as shareholders as individuals connected with the general business and prosperity of these respective municipalities. The "toll or duty on tonnage," at least so far as it is applicable to the products of other States, appears to be in *words* and in *spirit* directly in violation of the Constitution of the United States; but the question can only be brought to a test before the proper tribunal through other instrumentalities than those of this company, whose net profits the imposition of this duty does not so materially affect as it essentially restricts the amount of the tonnage brought to Pittsburg and Philadelphia.

Since the repeal of the tonnage duty on coal the transportation of the bituminous variety, which abounds along the line of our road, has become an important branch of the company's business. In consequence of the distance of the mines from the seaboard, the charges for freight must necessarily be light to permit its introduction to market in competition with that brought from the mines of Maryland and Virginia, from whence most of this description of coal consumed in Philadelphia has heretofore been obtained. The rate charged for its transportation is deemed profitable only in connection with other business, and with a view of keeping the rolling stock of the company fully employed during that portion of the year when there is a scarcity of freight of other descriptions. After the superior quality of the coal of the region traversed by our road shall have been fully established, it is believed it will command a price in the market such as to afford more remunerative rates of freight. To increase the business, however, it is essential that greater facilities should be furnished for its shipment and distribution at Philadelphia.

With a view to this object, as well as the more important one of reducing the cost of placing western produce on shipboard to its minimum, an act of Assembly was procured at the session of 1856, authorizing this company to extend the Philadelphia and Columbia Railroad to the Delaware river. This law will be submitted to you for acceptance, and your sanction is asked to the commencement of the work which it authorizes. Surveys have been made of several lines for this road, all of which pass by the new gas works of the city. The cost of the work, exclusive of warehouses and wharves, is estimated at \$350,000.

It is admitted that the expenditure for this work, together with that incurred by the company in constructing extensive sidings for the accommodation of their business at West Philadelphia (not exacted from any other transporter on the Philadelphia and Columbia Railroad), should properly have been done at the cost of the Commonwealth. The present policy of the State, however, seems adverse to a further extension of her public works, and it therefore remains for us to fill up the gap between the Columbia Railroad and the Delaware river, or forego one of the most important objects for which the Pennsylvania Railroad was constructed—the concentration of that portion of the produce trade of the west due to her position at Philadelphia. This object can only be accomplished by a reduction of the cost of delivering produce on shipboard to its minimum; and to effect this it is essential that all the expenses between the cars and the vessels to convey it to the ports of our own country, or to those of Europe, should be removed, and all State duties required of this company, not imposed

upon rival lines of our own or other States, should be repealed. Ships are not sent to Philadelphia for produce, in consequence of the inconsiderable amount of it at this time received from the west, and what is received is chiefly sent forward to New York for sale or shipment. Remove these shackles from trade, and a new era will open upon the port of Philadelphia. This desirable object can only be accomplished by the co-operation of the authorities of the State with the citizens of Philadelphia and the stockholders of this company.

The rolling stock upon the Pennsylvania Railroad consisted, at the close of the year, of—

133 Freight and passenger locomotives; an increase of 15 over the number reported last year.	
45 Wide passenger cars, adapted to the Harrisburg & Lancaster and Pennsylvania Railroads.	
22 Narrow passenger cars, adapted to the Columbia Railroad. The change of the space between the two tracks on this road will, after this year, admit of the use of wide cars.	
29 Emigrant cars.	
18 Baggage cars, with mail apartments.	
8 do do without do	
188 Eight-wheel stock cars.	
1245 do do house cars, for general merchandise and produce.	
109 Four-wheel house cars, for general merchandise and produce.	
227 Eight-wheel lumber, iron and wood trucks.	
92 Four-wheel coal cars.	

Some additional rolling stock may be required for the accommodation of the coal trade; but in other respects our outfit is deemed sufficient to meet future demands upon it.

It will be seen from the statement of the Treasurer, annexed to this report, that there has been received in payment from shareholders in the capital stock of the company, up to January 1, 1857.....	\$12,646,625 00
And from loans.....	8,516,841 46
Balance of interest and dividend due to stockholders, and State tax on coupons unpaid.....	65,297 75
Profits after payment of dividends Nos. 1 and 2 to stockholders, from the 1st of November, 1855, to Dec. 31, 1856.....	397,387 85
Surplus profits, Dec. 31, 1856.....	361,552 76
	<u>\$21,977,704 81</u>

Which has been expended as follows:

Graduation and masonry, including the superstructure of bridges, single track.....	\$7,924,792 82
Superstructure, including iron rails, chairs, cross-ties, ballast, stationery, printing and incidentals.....	2,771,571 36
Engineering, including rod, chain and axemen, instruments and office furniture.....	424,725 17
Land damages, fencing and real estate on line of road.....	503,440 74
Total cost of single track.....	\$10,924,570 00
Real estate, Philadelphia.....	733,472 28
Less amount of mortgages and ground rents.....	337,261 11
Leaving paid.....	396,111 17
Paid on real estate, Pittsburg.....	406,000 00
	<u>802,111 17</u>
Graduation and superstructure of second track.....	\$3,646,745 95
Less profit of road, after payment of interest to stockholders, up to November 1, 1855, which is credited, according to the terms of the charter, to cost of construction.....	589,119 79
	<u>3,057,633 19</u>
Machine shops, engine houses and shop machinery.....	\$ 722,134 42
Repair shops, machinery, &c., at West Philadelphia.....	60,032 79
Station and warehouses.....	863,054 13
Firemen's houses.....	86,738 34
Water stations.....	104,626 01
Locomotives.....	1,232,529 20
Freight cars.....	944,941 69
Passenger cars, including cost of two-thirds of Columbia Railroad line.....	176,418 23
Road and hand cars.....	33,920 01
	<u>4,210,404 82</u>
Telegraph line.....	45,198 02
Subscriptions to western railroads and stock dividends from same.....	1,619,850 00

Bonds of municipal and other corporations.....	\$ 17,452 60
Bills and notes receivable.....	666,049 89
Balance in hands of Treasurer and Agents.....	625,435 15
	<u>1,308,937 54</u>
	<u>\$21,977,704 81</u>

The gross receipts of the road for the year 1856, according to the statement of the Treasurer, are.....	\$4,724,603 78
Transportation expenses, State and Harrisburg & Lancaster Railroad tolls, interest, insurance, office expenses and rents.....	\$2,992,467 17
Dividends on stock, interest on bonds, and State tax on coupons.....	1,344,748 76
Profits of road for year 1856, after payment of dividends Nos. 1 and 2 on stock, equal to 8 per cent. per annum, interest on bonds, State tax on coupons, and all other expenses.....	327,887 35
	<u>\$4,724,603 78</u>

The earnings of the company from all sources during the year, as reported by the Superintendent, were.....	\$4,720,193 71
From which deduct tolls paid for use of other roads, as follows:	
Philadelphia & Columbia (State) Railroad.....	\$441,655 80
Harrisburg & Lancaster Railroad.....	234,182 69
Northern Cen. Railroad (freight).....	51,889 12
Philadelphia City Railroad.....	8,269 29
	<u>737,996 90</u>

Leaving business of the Pennsylvania R.R. \$3,981,196 81

The receipts from the business of the road, as will appear from the statement of the Treasurer, were.....	\$4,724,603 78
From which deduct transportation expenses, State tolls, Harrisburg & Lancaster Railroad tolls, Northern Central Railroad tolls, insurance, office expenses and rents.....	\$2,992,467 17
Deduct also interest upon loans and dividends Nos. 1 and 2, taxes, &c.....	1,344,748 76
	<u>4,337,315 93</u>

Leaves a surplus for the year of..... \$357,387 85

To exhibit the true condition of the year's business, however, there should be deducted from the last mentioned sum say \$110,000 to meet depreciation of iron, cross-ties and bridges; which amount, it is estimated (taking the average of a series of years), would be required to meet this depreciation.

The surplus profits on the 31st of December, 1855, according to the Treasurer's statement, amounted to \$949,853 55, from which should be deducted the sum of \$165,000, required to meet the payment of coupons and taxes due and payable the next day; leaving \$784,853 55 as the actual profits at the end of the year 1855.

The net earnings of the road during the months of November and December, 1855, are estimated at \$195,740 76; deducting this sum from the above \$784,853 55, there is left a surplus on the 1st of November, 1855 (from which period the company ceased to pay interest), of \$589,112 79. This amount the Board has directed the Treasurer to place to the credit of cost of construction, in accordance with the terms of the charter of the company.

The whole surplus profits at the close of the year 1856 would then be \$748,940 81; from which, however, should be deducted the sum of \$165,000, required to meet the payment of coupons and taxes due on the first day of this year; leaving \$572,940 81, as the actual surplus on the first day of January, 1857. This amount has been carried to the credit of a "contingent fund," and \$65,000 of that fund have been invested in the purchase of \$100,000 of the first mortgage bonds of the North Pennsylvania Railroad Company—



bonds which the Board consider a safe investment.

The cost of working the road (with perhaps the exception of the items of iron rails, cross-ties and bridges) attained its maximum, in proportion to the tonnage transported, during the year 1856, attributable mainly to the severity of the last winter. The renewal of car wheels, the destruction of cars caused by broken rails, and the damage to locomotives from the low temperature that continued for so long a portion of this period, caused these items of expenditure to reach a point equal to or beyond that which may reasonably be expected hereafter.

The iron rails obtained from the Safe Harbor and from the Montour works have not equalled our expectations; the quality being much inferior, both in strength and durability, to those made at Phoenixville, where the rails laid on the entire eastern division of the road were manufactured. The tables appended to the report of the Superintendent exhibit the earnings and expenses of the road in detail.

It will be seen by reference to these that the whole number of passengers conveyed during the year between Harrisburg and Pittsburg is equivalent to 148,653 passing over the entire length of the road, showing an increase, as compared with the year 1855, of 1,173, which increase is altogether due to the local business.

On the Harrisburg & Lancaster Railroad (operated by this company) the equivalent through passengers, between Harrisburg and Dillerville, adding in the number carried over the Columbia branch of that road, an equivalent distance, was 145,847, or 2,806 less than the equivalent through passengers over the Pennsylvania Railroad, notwithstanding the fertile and populous region through which that road passes. The same comparative result has obtained ever since the completion of the entire line of the Pennsylvania Railroad, demonstrating the great value of our local passenger business.

The through travel has not increased during the past year, owing to the greater comparative facilities enjoyed by our rivals through their western connections—those of this company remaining nearly in the same condition that they were in the preceding year, while on the north and on the south of us important additions and improvements have been effected.

The necessity of employing omnibuses for the conveyance of passengers between our western terminus, at Pittsburg, and the depot of the Pittsburg, Fort Wayne & Chicago Railroad Company, on the western side of the Allegheny river, has been a serious drawback upon the popularity of our road as a through line. To obviate this, our company, at an early period, subscribed to the stock of the Ohio & Pennsylvania Railroad Company an amount deemed sufficient for the construction of a bridge over the Allegheny river. This work, after considerable delay, has been completed; but, owing to adverse local influences, the approaches to the bridge have only recently been commenced, and in consequence this company and the traveling public, as well as the cities of Pittsburg and Allegheny, are the sufferers. It is much to be regretted that the objections of a few interested individuals should so long have prevailed to prevent the connection of these two important public improvements. Notwithstanding the delays and obstacles which have been encountered, and from which both companies have suffered so much inconvenience, it is believed that

this connection will be perfected during the ensuing spring.

Another inconvenience to the traveler upon this route, which will also soon be overcome, arises from the frequent change of passenger cars between Philadelphia and Pittsburg, rendered necessary by the narrow space allowed originally between the first and second tracks of the Philadelphia & Columbia (State) Railroad. This space was but four and a half feet, which does not afford sufficient room for the wider cars used on modern railroads to pass each other. In relaying the State railroad, now nearly completed, the space between the tracks has been made to correspond with that of the Pennsylvania Railroad. As soon as this is accomplished, the inconvenience of a change of cars between this city and Pittsburg will be obviated.

As a Cincinnati line, the present route via Crestline has objections, both on account of its length and its connection with roads whose owners consider our interests and accommodation as secondary to those of our northern competitors. This difficulty will be overcome when the road via Steubenville is completed, and partially so as soon as sufficient rolling stock shall have been placed on the line by way of the valley of the Ohio river from Pittsburg to that point; which latter route is 24 miles shorter than by way of Crestline.

The statement of emigrant passengers shows a small increase in number over the preceding year; but the lower rates obtained, chiefly owing to the increased charges on the Camden & Amboy Railroad, has caused a decrease in the aggregate of receipts from this source. This branch of the company's business affords but little profit, and its continuance is only valuable in reference to its influence upon the general traffic of the company and the character of the route, which requires that all facilities granted by other roads between the east and the west should be attainable upon ours.

The earnings from freight during the year 1856 were \$3,244,201 57, being an increase over the year 1855 of \$438,985 62. The through tonnage amounted to 165,163 tons, and the local tonnage (including the coal) to 288,829 tons, being an increase of 95,790 tons on the local, and a decrease of 6,809 tons on the through tonnage. The aggregate tonnage for the year was 454,092 tons, in which is included 190,344 tons of gas and other coals. During the first six months of the year (the greater portion of which time the Ohio river was navigable) the increase of through freights over the same period in 1855 was 43,743 tons, and the decrease in the last half of the year, as compared with the same period in the previous year, was 50,552 tons.

This falling off in the through tonnage in the latter half of 1856 is chiefly owing to the low stage of water in the Ohio river, to compensate for which the existing condition of our western railroad connections affords no adequate relief. Another obstacle in the way of increasing the through freight, already referred to, is the policy pursued by the State in imposing a duty of one dollar per gross ton, thus driving the produce of the west by other routes to the seaboard, by depriving this company of the ability to reduce rates, so as to draw the tonnage through Pennsylvania. To this discrimination against the Pennsylvania route, between the east and west, may also be added the extra expenses resulting from the use of the Philadelphia & Columbia Railroad as part of the through line.

## LAKE ERIE AND MICHIGAN TRANSIT SHIP CANAL.

A ship canal across the base of the peninsula of Michigan, connecting the waters of Lakes Michigan and Erie, would settle the question as to the course of our inland commerce. It would shorten the distance to Chicago and Milwaukee several hundred miles, and the time consumed in making the trip from these ports to Buffalo by about three days; or, in other words, the trip round, for propellers, by at least a week, and for sail vessels two weeks, and perhaps more. Of course, all tonnage going to or returning from the southern ports of Lake Michigan, would pass through the canal; the difference in time, and consequently in expense, being largely in its favor. Besides, the dangers of navigation among the islands, at the north end of the lake, a region always more dreaded by seamen in the spring and fall, with the exception of Lake Huron, than any other would be avoided, and the cost of insurance either upon the cargo or the vessel, would be reduced at least 50 per cent.—The upper and lower lakes would communicate with each other sooner in the spring and latter in the fall than they do now, for the reasons that there would be no waiting for the straits of Mackinac to clear of ice, nor comparatively no such tempestuous weather to encounter. Against these advantages no ship canal from Lake Huron to Lake Ontario, through Canada, could contend. Our own commerce would be retained upon our waters, and carried in our own vessels.

Of the practicability of its construction, there seems to be not the slightest doubt among those who have examined the subject. The country through which it would pass has few hills, and those small, so that the average depth of excavation for twelve feet water, would be less than twenty feet; and as the waters of Lake Michigan are only about 15 feet higher than those on Erie, the canal would be fed all the way (160 miles,) from the former, and only two or three locks would be necessary. The Michigan Central Railroad would, perhaps, not cross it more than once, and no difficulties could arise in this particular, nor that of any other of a similar nature. In fact, so far as cost of building, and ease of excavation and embankment are concerned, the enterprise must be, from the nature of the country, without a parallel.

The regions of country, the surplus products of which this canal would drain, comprehend Wisconsin, Minnesota, Illinois, Iowa, Missouri, Nebraska, parts of Indiana, Kentucky, Kansas, and all future States and Territories lying directly west of it, between the Mississippi and the Rocky mountains. What the full extent of the trade of these regions with the seaboard is to be, of course no one can imagine, but that it will be and is already, immense, no one doubts. During the past year, some 27,000,000 bushels of grain came from Lake Michigan; and this is only a part of the down freight. Even if the tolls and expense of towing through the canal were equal to the expense of the passage via the Straits, it would yet be an object for shipping to pass through it on account of the time that would be saved, enabling vessels to make several more trips during the season. This consideration affords a view of the margin there would be in fixing the rates of toll, in order to derive a revenue which would pay a good dividend upon the investment. No more practicable and important scheme for the improvement of inland



navigation has ever been broached, nor one more fraught with beneficial results to the State and city of New York.—*Buffalo Commercial Advertiser.*

#### SONORA EXPLORING AND MINING CO. FIRST ANNUAL REPORT.

The object for which the Sonora Exploring and Mining Company was formed is one of great interest at the present time. The United States had spent Ten Millions of Dollars in the purchase of a strip of country taken from Sonora, in Mexico. This strip situated, between the immensely valuable gold-bearing State of California and the equally valuable silver-producing States of Mexico, might, from analogy of geographical position and geological formation, be supposed to contain valuable minerals, which needed only enterprise and labor to develop. Convinced of this fact, as well from personal knowledge as from the testimony of others, the projectors of this company set out a year ago with the determination of exploring this region, then under the absolute dominion of the tribe of Apache Indians, who had more than a hundred years ago destroyed the early settlements of the Spanish, and driven them to the more southern provinces. To do this with safety, it was necessary to send an armed party, of sufficient strength to protect itself under any contingency, and to maintain its position against any force of Indians that might be expected to attack it. When the work of exploration was brought to a successful issue, the same party were to hold possession and protect the miners and laborers that were needed to develop the property acquired.

#### HISTORY OF THE COMPANY.

Such was the object of the projectors of this important enterprise. On the 24th of March, 1856, the company was formally organized, articles of association drawn up, and officers elected. Col. Charles D. Poston, a gentleman of experience in this territory, was selected as the Military Commandant of the exploring party and Agent of the company in Sonora. He was entrusted with the important duty of forming the party, procuring the necessary scientific aids, and the selection of mines and lands. In his letter of instruction he was directed to explore from the Rio Grande to the Colorado, and examine the mineral deposits of this region; to seek for abandoned mines, and to select the best location for the permanent operations of the company, that his explorations and opportunities of information might dictate. In all cases to prefer silver to gold, and to locate as near the navigable waters of the Pacific as might be consistent with the possession of the best and most promising property. In compliance with these instructions, Mr. Poston proceeded to San Antonio, in Texas, and there outfitted his party. Some delay was experienced at San Antonio, in consequence of the non-arrival of the arms and military equipments sent from Cincinnati for the use of the party. On the reception of these, Mr. Poston and his party set out on their expedition, and arrived safely at the Rio Grande. Here the party rested to recruit the animals and refresh the men. While

resting here, offers of mines near the Rio Grande were entertained and forwarded to the Directory; these were duly received and considered. They were not accepted, in consequence of higher anticipations at the west. Leaving the Rio Grande, the party visited the copper mines near that river, and forwarded their report on them. They next followed Gray's Route as far as La Puerta, which they pronounce to be the best pass for railroad purposes, or for emigration, in that whole chain. Thus far the incidents of the expedition had been attended with but little serious danger. At La Puerta, however, they encountered a war party of fifty Coyotero Apaches, returning from a foray into Mexico; but prompt and decisive action on the part of the Commandant deterred the Indians from an attack that was doubtless premeditated. The energy and decision displayed by their agent in this matter shows the selection of the company to have been well made. Passing on to the west, by Park's route, they found considerable obstructions; but, having surmounted all, arrived safely at Tucson in the latter part of August. Here they were joined by Mr. Ehrenberg, a geologist of great experience in this section, and whose accession to the company was considered very desirable. The headquarters of the company were established at Tubac, which, under Mexican rule, was the center of operations in this region, and to our company was a very desirable location, from its pure air, good water, and abundance of grass and wood. The party are now safely established there, and have permanent buildings and secure defenses in case of attack. The danger of this, however, has been greatly lessened by the arrival of Major Stein and his command of United States dragoons, established at Calabazas, within fifteen miles of Tubac. This fortunate circumstance relieves our party at once of the care and trouble of Indian fights, and leaves them free to engage in their mining pursuits with perfect safety.

The attention of the party was first directed to the Santa Rita Mountains, where indications of ore were found. These, being traced up, led to the discovery and occupation of the old works known by tradition as the Salero and Ojero mines, and to the discovery of twenty-two new veins of silver ore in the same mountains; all of which were at once occupied, and measures taken to give the company a legal title to the same. A permanent camp was established, and miners set immediately at work cleaning out the old shafts and opening new ones. According to tradition, the last attempt to work these mines was thirty-five years ago, when the whole party were killed by the Apaches. Their ruined huts still remain, and attest the fact of their occupation. The mines were said to yield ten per cent. of pure silver. The Salero (salt cellar) mine took its name from the incident which gave rise to its occupation. When the Bishop of Tumacacori, a mission three miles south of Tubac, came to take charge of his diocese, he complained much of the hardships he had to undergo in this northern province compared with the luscious fare and rich viands of his former residence at the south, and one day at

table said he had not even a salt cellar to hold his salt. One of his zealous parishioners said "Wait until next Sunday and I will bring you one." He immediately took to the mountains, and fashioned a rude salero from the silver mine in the Santa Rita Mountains, which in due time graced the Bishop's table, and gave its name to the mine. The Ojero owes its name to blue spots in the ore, resembling the blue under the eyelid. One of the new veins upon which work has been commenced contains lead with the silver, and is said to be rich. In consequence of the want of suitable chemicals, no accurate assays had been made; but the blow pipe tests of the scientific gentlemen, who accompanied the expedition, show that these ores will well pay the trouble of working them.

The fine old ruins of the mission of Tumacacori show this to have been an important point with the Spanish Jesuits who first opened these mines. The company immediately set to work building a muffle oven, and it is now in blast and works to their entire satisfaction. From the small amount of rubbish found on the outside of the mine the party were led to believe that the shaft had not been driven to any great depth. Advices as late as the first of January, however, state that the miners had reached a depth of sixty feet, and were not yet to the bottom. The vein held good and regular. We are, therefore, led to infer that the ores taken out were rich enough to warrant transportation, and were nearly all taken away from the mine for the purpose of smelting, in which case the propriety of going to the bottom would be all the more evident.

Dispatches dated the first of January have been received from the agent of the company, announcing the gratifying and important fact that he had concluded the purchase of the Arivaca Rancho from the Mexican owners. This rancho is situated twenty miles west of Tubac, and contains four leagues (seventeen thousand acres) of land, susceptible of cultivation, and includes within its boundaries twenty-five well known silver mines that were worked by the Spaniards, and probably many more unopened and undiscovered. Copies of the title papers, vesting the fee simple and absolute in the President of this company and his successors in office, in trust for the stockholders, forever, duly acknowledged and recorded, are now on file in the office of the company. The landmarks of this rancho are testified, by competent legal officers, to be the same that they were in 1802, and possession and occupancy was delivered immediately; so that the Sonora Exploring and Mining Company now stand sole owners and occupants of the famous old mining rancho of Arivaca, or, as the Mexican records give its name, "La Arivaca." Its mineral resources will be immediately developed, and the stockholders may entertain a reasonable expectation of a remuneration for the expenses of the explorations and purchase.

#### VALUE OF THE MINES.

It is almost impossible to give an adequate idea of the value of the mines already acquired by this Company, because they are as yet unde-



veloped, and their richness unknown. It is a conceded fact, however, that the characteristics of the mines of Southern Mexico, which have given the nobility of that country their immense landed estates, were rather the abundance than the richness of their ores. That in many instances these mines were worked to a depth of several thousand feet, and still repaid their owners with immense fortunes every year. Ward states that Zambrano paid, as his tax of one-fifth the proceeds of his mine, \$11,000,000. The mine of Arevalo, in 1811, yielded in seven weeks \$200,000 from one level called El Divino Pastor. The Biscaina vein, which, in 1726, had produced \$4,341,600, and was subsequently abandoned on account of water, was re-opened in 1762, and in twelve succeeding years produced \$6,000,000. The mines discovered by the Indian brothers Arauco, in the district of Morelos, in 1826, produced in two months \$270,000. In 1825 the owner of the mine of Nuestra Sonora de Guadalupe refused \$1,000,000 for the privilege of working it three years.

Humboldt estimated the whole produce of the Mexican mines in 1803, at \$1,767,952,000.

The northern mines are conceded to be richer in the quality of their ores, and to be nearer the surface. Indeed the veins now owned by this Company all outcrop on the surface, and can be distinctly traced along the soil. The proceeds of the Stevenson mine near the Rio Grande, at the farthest possible spot from navigation, worked by a Mexican lessee, without enterprise, capital, skill, or even a sufficient supply of hands, the ores of which yield but 2½ per cent. of pure silver, and have to be transported twelve miles on mule-back to the smelting Hacienda, are stated to be now over twelve thousand dollars per annum. The officers of your Company therefore believe that they make a low estimate when they state that each vein of silver now in your possession, when worked with skill and energy, will yield the Company a nett profit of at least ten thousand dollars per annum. The annual results may then be put down as follows:

#### ANNUAL PRODUCE.

Salero and Otero mines at \$10,000 each.....	\$20,000
22 new veins in Santa Rita mountains.....	220,000
25 mines at La Arizaca.....	250,000

Total annual product.....\$490,000

And this estimate is irrespective of any new veins that may be discovered and opened and of the agricultural value of the rancho, which, in that section, must be very great. That these views are borne out by the agent of the Company and the scientific gentlemen on the expedition, you will readily perceive from the following extracts from his letter of January 1, in which, after announcing the purchase of the Arivaca Rancho, he states, "This is a great acquisition, of value beyond computation or present imagination, because its resources are entirely undeveloped and unknown. The boundaries include four leagues, and inside of these boundaries are known to exist twenty-five or thirty silver mines which were worked by the Spauiards, and we may reasonably conclude many more different and distinct mines may

be found on the same place unopened and undiscovered. This tract contains more mines than any other body of land in the territory, of the same size, and perhaps in the world; and is well known to Maj. Emory, Lt. Michler, Col. Gray and all the military and scientific men who have visited this country. I would not give it for a German dukedom, because it is intrinsically and really worth more, and will become more and more valuable as developments and discoveries are made, for years."

Such is the opinion of your agent, borne out by that of practical men who have been in person on this estate. The officers would, therefore, congratulate the Company on its fortunate acquisition, and express their belief that the developments of the future will warrant their present convictions. But, to do this, means must at once be forwarded to place these mines in a state of rapid and permanent development. The appliances of an assay office and dies and machinery for coinage, should at once be sent. A stock of goods to be employed, as stores for the miners, and to supply the wants of the surrounding country, should be forwarded without delay, and such other measures taken as will place the immensely valuable estate of this Company in a stage of rapid and profitable development.

[From the Philadelphia Inquirer.]

#### PENNSYLVANIA—THE CANALS AND RAILROADS OF THE STATE.

The Annual Report of the Canal Commissioners furnishes most valuable information in relation to the public works of Pennsylvania. The document is quite voluminous, but a glance at its material statements will prove sufficient for most readers. The total receipts for 1855 and 1856 are thus given.

	Tolls in 1855.	1856.
Columbia Railroad.....	\$57,059 84	\$53,004 29
Portage Railroad.....	18,150 09	20,047 23
Main Line of Canal.....	243,007 77	249,891 93
Susquehanna and North and West Branches.....	405,989 27	431,824 70
Upper North Branch.....		885 55
Delaware Division.....	388,914 63	353,782 74
Total increase.....	\$1,913,121 60	\$2,009,466 44
		\$56,244 84

It will be seen that the chief increase was on the Columbia Road, the total receipts on which amounted to nearly a million of dollars, thus:

Philadelphia.....	\$574,473 08
Paoli.....	13,463 42
Parkesburg.....	46,267 84
Lancaster.....	65,312 74
Columbia.....	253,317 21
	\$953,034 29

The expenditures on this road were as follows:

For maintaining motive power on the Philadelphia & Columbia Railroad, exclusive of the purchase of locomotive engines and improvements to depots and machinery.....	\$355,990 49
For repairs on the Philadelphia & Columbia Railroad, exclusive of rebuilding and improving bridges, and building office and carpenter shop.....	79,275 43
For collectors, weigh-masters, inspectors and incidental expenses of their offices.....	13,291 01
	\$448,556 93

For maintaining motive power on the Allegheny Portage Railroad, including the management and repair of State trucks, and the purchase of locomotive engine.....	\$140,250 00
For repairs.....	37,500 00
For collectors, weigh-masters, inspectors and incidental expenses of their offices.....	3,554 53
For use of Pennsylvania Railroad.....	12,500 00
	\$193,804 53

The recapitulation is quite flattering, and exhibits these results:

Expenses of Columbia Railroad.....	\$448,556 93
" Portage ".....	193,804 53
" Main Line of Canal.....	198,015 57
" Susquehanna, North and West Branches.....	152,932 34
" Delaware Division.....	83,355 77

Total expenditures.....	\$1,076,685 14
Total receipts of tolls.....	2,009,466 44

Receipts of tolls over expenditures.....	\$932,781 30
Add tonnage tax from competing railroads..	222,227 68

Making the actual profits of the works, over expenditures, for 1856.....	\$1,155,008 98
--	----------------

The tonnage tax is derived from the following sources:

Pennsylvania Railroad.....	\$197,998 95
Northern Central R. R.....	1,935 82
Harrisburg & Lancaster.....	23,062 91
	\$222,997 68

It thus appears that the receipts of tolls from the several lines of canal and railroads amounted to \$932,781 30 over the expenditures; being an increase over 1855 of \$110,087 28. If the tonnage tax be added to the receipt of tolls, then the clear profits of the year amounted to \$1,155,008 98.

The receipts from tolls for 1856 exceeded those of 1855 by the sum of \$96,344 84.

The comparative statement of the profits of 1855 and 1856, including tonnage tax, is as follows:

1856.....	\$1,155,008 98
1855.....	1,019,629 78

Increase in 1856..... \$135,379 20

The Board estimate the receipts for tolls for 1857 at \$2,200,000. This estimate is based on the supposition that the whole North Branch Canal will be in navigable order during the year. It is observed that a great drawback upon the revenues of the works of the Commonwealth, as well as of those of private companies, which extend from the Atlantic to the Ohio, is the extreme low water in that river for several months in the latter part of every year. An improvement of that river, so as to afford navigation to even small draught steamboats at all seasons of the year, when not intercepted by ice, may be considered a matter of national importance. Such an improvement would benefit not only Pennsylvania, but every State through which that river or its tributaries flow. The project is one which may be beyond the means of individual enterprise. Works of less extensive importance have, within the past few years, received material aid from the General Government. If that aid is still to be recognized as within the constitutional powers of Congress, there can be no reason advanced why it should not be extended to the making of the Ohio navigable at all seasons. The mechanics, the merchants, the farmers, the landholders, the private and public works of several States, are deeply interested in such an improvement. If works of a kindred, but less important character, are to be constructed from the funds of the National Treasury, it will be difficult to assign a reason why the Ohio river should be made an exception. The opinion is also expressed that with careful management, and a strict accountability of the funds which may come into the hands of the public agents, the net revenues derived from the canals and railroads of the Commonwealth must continue to increase. This opinion is sustained by the following comparative statement of tolls received for the past fourteen years, viz:



1843.....	\$1,017,841 12	1850.....	\$1,768,209 46
1844.....	1,067,603 42	1851.....	1,793,624 82
1845.....	1,196,979 43	1852.....	1,896,811 42
1846.....	1,295,404 76	1853.....	1,933,199 91
1847.....	1,581,576 87	1854.....	1,876,078 88
1848.....	1,533,344 00	1855.....	1,913,121 80
1849.....	1,633,277 72	1856.....	2,009,466 44

From this statement it is shown that the increase in the receipts of tolls alone for the year 1856 over 1843 was \$991,625 32. Adding the tonnage tax received in 1856 (\$222,227 68), which legitimately belongs to the revenues of the public works, the real increase of tolls in 1856 over 1843 was \$1,213,839.

The Report, on the whole, is highly encouraging, while it is written with clearness and ability. If all the leaks could be stopped, and the Main Line could be sold to advantage, the debt of Pennsylvania would gradually, but certainly diminish, and thus the necessity for the enormous and oppressive taxation that is now imposed would exist no longer, and greatly to the satisfaction of the people generally.

[From the American Railway Times.]

#### THE OCEAN TELEGRAPH.

Prof. Hall, of New York, the inventor of a telegraphic clock, pronounces it impracticable to telegraph through a submarine cable traversing the Atlantic, on account of the retardation of the current by induction, and proposes a scheme of his own for breaking the line up into convenient sections, by anchoring stationary vessels, 500 miles apart, and operating from one to the other. Of the possibility of constructing and working such a line there need be no doubt, and we believe there has been none since it was first proposed, soon after Mr. Morse's first success. But whether it would pay for construction and working is another matter. That it could not be afforded, provided the through plan will work, we think there can be no doubt. If a single cable, such as is about to be submerged, can be made to work, though even slowly, the number of cables may be multiplied, and the saving of four stationary vessels, and the maintenance of operators on mid-ocean will make them far cheaper. The objections advanced by Professor Hall to long submarine cables are old ones, and have been so far removed by the experiments of Prof. Whitehouse, that there is no more reason to doubt the efficient working of the Atlantic line than of an atmospheric line of equal length. The experiments have been such as to settle the practical question that an available rapidity can be attained in spite of induction and retardation, by making the cable small, while the coating is made very thick, and using the magneto-electric, instead of the Voltaic current. An interesting and well illustrated article in the London *Engineer* makes this subject quite plain. It says:

When first the project of a sub-oceanic telegraph was discussed, some years ago, it was considered, by many of those conversant with electrical theory, that the retardation of the electric wave, which takes place in passing through a long, insulated wire, when surrounded by a conducting medium, such as water, would, in consequence of the resistance occasioned by the phenomena of induction, render the transmission of signals through such a conductor extremely slow, unless the size of the wire were increased to such an extent that would render the construction of the line impracticable. But, by the experiments of Mr. Whitehouse, already detailed in this journal, it was shown that increasing the

size of the conductor did not facilitate the transmission of the electric current under such circumstances; but that, on the contrary, the greater the amount of surface, and the increased mass of the conductor, only enabled it temporarily to absorb a larger portion of the primary current. It was clearly shown, however, that the thickness of the insulating coating exercised a material influence in regulating the amount of induction, and that it was more desirable to increase the thickness of the insulating medium than the sectional area of the conductor.

To understand the influence of the induced current of electricity in retarding the transmission of signals through a telegraphic wire, it should be borne in mind that when a conductor is enveloped in a coating of some non-conducting material, such as gutta percha, and then placed in water, it is subject to the same conditions as a Leyden jar—the conducting wire forming the internal coating, the gutta percha corresponding to the glass, and the water to the outer coating. Now, it is well known to electricians that in charging a Leyden jar the strength of the charge which it will take is more dependent upon the thinness of the glass which separates the coatings than upon thickness or thinness of the metal used for the coatings.

In the case of the telegraphic wire, the object is to avoid charging the outer conducting medium, so as to obviate the induced current which it sets up when its electrical condition is disturbed by the presence of a charge of electricity in the internal coating during its transit through the wire. The object, then, is to render the telegraphic cable as different as possible in its electric condition to that required for a Leyden jar. And, as already stated, this was found to be best effected by increasing the thickness of the non-conducting material employed, and by diminishing, as much as possible, the sectional area and the surface of the internal conducting wire. In the course of a long series of experiments, conducted by Mr. Whitehouse and Mr. Bright, of the Magnetic Telegraph Company, it was ascertained that, as by varying the kind of electricity made use of, the speed of transmission could be increased or diminished at pleasure, the true solution of the difficulty lay not in increasing the size of the conductors, but in the application of a more energetic development of electrical force. With the view of testing the capabilities of electrical currents of this character, apparatus was contrived by these gentlemen by means of which an inductive current of great intensity was obtained, by a peculiar arrangement, in which the coil of the primary current in connection with the battery was placed outside the secondary coil, so as to allow the latter to come as close as possible to the electro-magnet—which, when excited by the coil of primary wire, produced in the secondary coil an induced current of the character required for traversing great lengths of submarine and subterranean conductors, so as to produce an effect at the further ends without greater delay than what at present takes place in the transmission of signals through circuits of comparatively small length, ordinarily employed for telegraphic purposes.

This apparatus was applied successively to various lengths of conductors, similar in electrical conditions to those of the Atlantic cable. Continuous lengths of telegraphic wire from 1,000 to 2,000 miles, connected to the earth at each extremity, were signalled through with-

out difficulty, and at a rate producing from 230 to 270 beats per minute of the recording instrument, or from 15 to 20 words per minute.

The cable which has been fixed upon for the Atlantic telegraph is composed internally of a central core of seven copper wires, No. 22 gauge, twisted together so as to form a strand, which is surrounded by three consecutive layers of the finest gutta percha, as the insulating medium. The reason why the whole of the gutta percha coating is not laid on at once is that in such a case any accidental flaw in the coating so applied, occasioned by the presence of air-bubbles, water, or any other foreign substances, would most likely penetrate from the external to the internal surface of the gutta percha, and thus endanger the insulation of the central core or conductor. By applying the gutta percha in three distinct layers, one after the other, any flaw or imperfection in one coating is certain to be overlaid by either of the others. A lapping of yarn, saturated with a mixture of tar and pitch, is then wound round about the gutta percha covering, to serve as a bedding upon which the external protecting wires are placed.

The protecting strands are eighteen in number, each composed of seven charcoal annealed iron wires, No. 22 gauge. There are, therefore, 133 miles of wire employed in the formation of each mile of cable; or, for the entire length of 2,500 miles to be constructed, no less than 332,500 miles of wire must be drawn and twisted into 47,500 miles of strand, 2,500 miles of which will be embosomed in a thick, insulating coating of gutta percha, to which the remaining 45,000 miles will be applied as a protection against strain or external injury.

The diameter of the cable, when completed, will only be about  $\frac{3}{4}$  of an inch, and, from the way in which it is made, it will be so flexible that it may be tied in a knot round the arm without injuring it.

The central conductor is formed of a strand of seven copper wires in order to obviate the risk of any metallic flaw occurring in the manufacture affecting, by subsequent separation at the point of flaw, the transmission of the electric current.

The central conductor being formed of a strand of seven wires, in place of a single wire of the same sectional area, if a flaw exist in every one of the seven wires, there is no possibility of these all occurring in the whole of the seven wires at the same place; and it is evident that were these seven flaws collected in a single yard of the strand, at intervals of a few inches apart from each other, the conducting power of the strand as a whole would not be reduced by more than one-seventh.

The weight of the cable is slightly under a ton to the mile. Many of the cables hitherto laid have weighed eight to nine tons to the mile; but it was considered essential in this instance to adopt a size of cable that could be stowed away and carried in two vessels of from 2,000 to 2,500 tons burthen each. It was not considered feasible to carry out the undertaking without great risk, if more than two vessels were employed in the operation of laying; for, in such case, after the two vessels had joined the end of the cable at the starting point, in the middle of the Atlantic, it would have been necessary for them to effect further junctions with other vessels, in carrying out the operation of laying the line.

Each of the two vessels will bear 1,250



tons of cable, besides coal and provisions for a month.

The outer protecting casing of other cables has hitherto consisted of single wires laid together; but in the Atlantic cable strands are employed, as by this means far greater pliability is obtained, and at the same time much greater proportionate strength.

The outer covering wires of the early submarine cables were galvanized; i. e., protected by a coating of oxide of zinc, with the view to preserve the iron wire from oxidation by the action of the water after submersion; but it was found that any flaws in the zinc covering produced local galvanic action between the iron wire and the zinc, resulting in a mutual decomposition; while, at the same time, the process of applying the zinc coating materially reduced the tenacity of the iron wire.

At each side of the Atlantic, for a distance of about thirty miles from shore, it is proposed to lay a far thicker and heavier cable, in order that by its weight and strength it may be enabled to resist any injury from anchors or currents; and light buoys will probably be attached to the thick parts of the cable, in order to mark out its position.

Beyond this distance the depth is so great that there are no currents that can disturb the position of the light cable; and, at the same time, the bottom is so soft, being composed of microscopic shells, analogous to those of the chalk formation, that the cable, on submersion, will bury itself many feet below the surface.

A continual deposit of these shells is taking place throughout the plateau between Ireland and New-Foundland, and, in course of time, through a constant augmentation from above, the stratum in which the cable is laid will no doubt become consolidated, and the cable thus protected from injury for ages.

The cable is capable of resisting a strain of about four tons; and as the greatest depth is 2,072 fathoms, or  $2\frac{1}{2}$  miles, the maximum of vertical strain upon the cable, which loses about one-third of its weight in water, will only amount to a ton and a half—the difference of specific gravity between the water and the cable.

#### PAST AND PRESENT.

The present generation knows little of the condition of things in our land thirty, or even twenty years ago; and were it not for the reminiscences of that time we should forget entirely that we were ever without the comfortable cars and floating palaces that now bear us swiftly and surely on our way. It is, therefore, not out of place to insert the following, from the pen of the Hon. Wm. Parry, of New Jersey. It was written for the *Trenton Republican*, in advocacy of a general railroad law:

*To the Editor of the Republican*:—I hereby send for thy perusal a circular, showing the railroads centering at Indianapolis, the capital of Indiana, and giving some statistics of the rapid growth of that place within the last ten years.

As I was traveling through that State a little previous to the construction of the first railroad, which was built there in 1847, it may not be improper to relate how we got along without railroads. In leaving Indianapolis, I took passage, with three others, in the wagon that carried the United States mail, by way

of Terre Haute and Vandalia, to St. Louis. That was the only public conveyance for travelers going west. We started at nine o'clock at night, with four spirited horses. It was raining, and soon became very dark; the road was muddy and uneven, and the carriage upset about 11 o'clock, throwing passengers and baggage into the mud. With some difficulty we managed to right up again, while the driver held his horses. He apologized, and gave some comfort by saying he would not do so again, which promise he kept for two hours, when about 1 o'clock he accidentally drove off the end of a bridge having no railing to it, and upset again, pitching the contents of his wagon—passengers, trunks, carpet-sacks and mail bags—into the ditch, in one miscellaneous pile. It required some patience and perseverance to gather our baggage from the mud and water and get started again. Although on the National Road, we did not arrive at Terre Haute until dark next night. Such accommodation for travelers was considered a great improvement over what had preceded it; for Indiana was only admitted into the Union in 1816, with a population of 65,000, and for years a single horse and pack saddle was employed in carrying the mail, while the commerce of the country around the capital was carried between Cincinnati and Indianapolis by the semi-monthly six-ox train. It is interesting to compare the present mode of traveling, and conveniences for transacting business, with those times, and contemplate the wonderful change that has taken place within a few years, and the cause which produced it. Then Indiana contained the same number of acres as now; then she embraced the same minerals, the same soil, and lay in the same rich valley; her rivers and smaller streams then, as now, meandered through every part of her territory. But previous to 1847 there was no railroad completed in the State; now there are about 2,000 miles, traversing all parts of the interior, affording those facilities which are necessary to develop her resources; and eight of the principal roads, comprising 1,500 miles of track, terminate at Indianapolis. Then the United States mail coach occupied a day and night going from Indianapolis to Terre Haute; now the cars run through in three hours and seven minutes. Then Indianapolis contained but 4,000 inhabitants, and the only public conveyance going west carried four passengers; now it has over 20,000 inhabitants, and nearly one hundred different trains pass in and out of the city, carrying from three to five thousand passengers daily. Then but few persons were able to visit the capital and return home the same day; now the citizens of eighty out of ninety-one counties of the State, comprising 1,500,000 inhabitants, can leave their homes in the morning, visit Indianapolis, attend to their business, and return home the same day. These are but a part of the improvements. Other branches of industry have kept pace with the facilities afforded for their accommodation; commerce, manufactures, arts, science and literature are in a flourishing condition, and all combine to substantiate the wisdom of the policy there pursued.

One of the most enterprising citizens of Indiana, to the question "What had caused the rapid increase in population, wealth and business since 1850?" answered, "It is mainly the effect that has been produced by the concentration of our railroads upon every class of industry, but especially in raising up manufactures; and bringing to our cities

dealers in merchandize, in connection with the products of our farming and mechanical community; in affording facilities to migration; in opening to the citizens and capitalists of other States, the benefits resulting from our local position; in stimulating our people to action by giving a fair reward to productive industry."

There, under the operation of a *General Railroad Law*, when the farmers and citizens desire a new Railroad to accommodate their neighborhood and bring them within reach of market, it is only necessary to survey the route, file a certificate thereof in each county through which it passes, open books, sell stock and proceed at once with its construction. Hence, the citizens of each section of the State depending on their own exertions, provide railroad facilities for themselves without restraint from those of any other section, and all enjoy an equality of rights and privileges so very essential to the welfare and prosperity of any country. Under that liberal system Indiana has advanced in population, wealth and prosperity to be the seventh State in the Union.

In striking contrast with the above is the policy pursued in this State, as well as the effect which it has produced. Although railroads have been in operation here for more than twenty years, we have but 473 miles completed. The people are not allowed to build railroads where they would best promote the public good, and in a large part of New Jersey there is no better mode of conveyance now than before the invention of railroads, and although we have large tracts of fertile land, it is left uncultivated, and men of capital and enterprise go to the west, where they are not restrained from making internal improvements, but all are permitted to help make roads to market, knowing well that a market will not come to them. While this policy is adhered to, our State will continue to suffer in wealth and population to the extent that people with their means are driven to the West, and it has already descended from the ninth to the nineteenth State in the Union. When will this state of things be arrested? New Jersey has many natural advantages; is one of the oldest States whose shore is washed by the broad Atlantic, bearing on its bosom the commerce of Nations; lying near the best markets in the Union, and directly across the great line of travel from North to South and West; is highly favored in climate, soil, minerals, wood and water, combining all the elements of a great agricultural district; no natural impediments to the construction of Railroads, which are so beneficial wherever they are used. Why should the people of our State not be allowed to build them? Will our people remain satisfied to let our beloved State thus slide backwards, while those but recently admitted into the Union, located far in the interior, whose foreign commerce must be transported a thousand miles to and from the sea board, are moving forward with rapid strides? Or will they act upon the wiser plan that like causes produce like effects and follow the example that has worked so well in other States? With sentiments of regard and a desire that this subject may be kept before the public mind, until that course, which is best calculated to promote the greatest good of the greatest number, advance the prosperity and develop the resources of all parts of our State shall be adopted, it affords me pleasure to subscribe myself very respectfully,

Thy friend, WILLIAM PARRY.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'l.	When Payable.	Where Payable	When Due.	Description of Bond.	Name of Company.	Quot' of Stock	Len' of Road	Capital Authorized.	Cap'tl paid in.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
1,000,000 00	6			1860	1st mortgage.	Al'x'ndria, Lon. & Hmp'st	173	173	5,000,000.00					
498,800 00	6			1862-3	2d "	Androsco'gn & Kennebec	5455	5455	1,400,000.00			209,475.40	110,246.98	none.
199,000 00	7	July & Jan.			Domestic.	Atlanta and LaGrange...	86.5	86.5	1,000,000.00		129,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646 26	6			now	"	B'ng't, Old T. & Milford...	12.5	12.5	135,000.00		52,646.26	29,104.40	8,671.61	15,000 n' 53
500,000 00	6			1860	"	Boston & Worcester...	445-8	445-8	4,500,000.00		500,000.00	1,108,781.90	437,062.03	18000 4.6m
500,000 00	7		N. Y.	1866	1st mortgage.	Buffalo & State Line...			1,300,000.00					5 pr. ct. 6m.
300,000 00	7			1857-9-52	Income.	" " "								
500,000 00	7			1864	Domestic.	" " "								
577,187 00	6			1872	1st mortgage.	Central Ohio.								
192,200 00	7			1874	2d "	Champl'n & St. Law'rnce	43	43	1,872,800.00		1,601,087.00	168,200.00	77,200.00	10 per ct.
380,000 00	7				Domestic.	Ch'l'te & South Carolina.	110	110	1,750,000.00		380,000.00	291,219.86	47 per ct.	\$72,300
1,140,000 00	6-7-8		N. Y.	1864-7	1st mortgage.	Cb'go, Burl'ng'n & Quincy.	138	138	3,746,900.00		3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,300,000 00	7			1868-9	2d "	" " "								
374,000 00	8			1868-76	Convertible.	" " "								
1,500,000 00					1st mortgage.	Chicago, Fulton & Iowa...	131	131	1,761,149.16		2,241,500.00	221,491.96		
532,000 00					2d "	Cin. Will'ng'n & Zanes'ville								
104,000 00					3d "	" " "								
305,500 00	6			1873	Income.	" " "								
540,000 00	7			1864	1st mortgage.	Cleveland & Mahoning...	85	85	1,500,000.00					
400,000 00					2d "	" " "								
1,000,000 00	7			1873		Cumberland Valley...	52	52	1,218,300.00		1,000,000.00	160,511.56	81,101.56	\$33,250.24
500,000 00	8			1857-8-9	1st mortgage.	Dayton & Cin. short line.	32	32	1,000,000.00					
						Eastern Railroad...	936-10	936-10	3,345,400.00			685,578.59	283,087.84	\$24,133
350,000 00	7			1869	1st mortgage.	East Tcn. & Virginia...	130	130	625,450.00			30,897.20	19,692.30	
740,000 00	10			1861	1st "	Essex Railroad...	20	20	700,000.00			843,974.42	138,081.90	\$153,281.45
88,000 00	7			1864	2d "	Evansville & Crawd'vle	109	109	2,228,637.00			681,162.52	213,837.81	3 per cent.
400,000 00	7			1876	1st mortgage.	The Fitchburg (Mass.) R.R.	81	81	3,540,000.00					
200,000 00	10				2d "	Fox River Valley...	33	33	800,000.00					
						Fair Haven Branch...	15	15	300,000.00			50,381.33	14,823.45	\$166,240.00
100,000 00	6				1st mortgage.	Georgis R.R. & Banking Co	233	233	4,150,000.00			1,068,212.58	357,689.42	\$166,240.00
100,000 00	6				2d "	G't Falls & Conway R.R.	20	20				27,376.69	14,207.07	
300,000 00	6			1858	1st "	G't West'n R.R. of Can...	281 1/2	281 1/2	4,191,550.00			2,068,336.00		8 pr. ct.
4,000,000 00	6 1-9			1869-70	1st "	Housatonic Railroad...	74	74	2,000,000.00			339,196.50	176,529.95	
2,000,000 00	7			1860	2d "	Hudson River...	144	144	4,000,000.00			1,924,382.44	718,037.40	
1,812,000 00	7			1873	3d mortgage.	" " "	144	144	4,000,000.00					
2,885,000 00	7			1876	1st "	Illinois Central R.R.	704	704	17,000,000.00			1,532,117.00	562,221.00	7 pr. ct.
4,115,000 00	7			1860	2d "	" " "	704	704	17,000,000.00					
3,000,000 00	7				1st mortgage.	Indiana Central...	72 1/2	72 1/2				354,871.00		3 pr. ct.
600,000 00	7	Nov. 1			2d "	" " "								
700,000 00	7	Jan. & July 1		1862	1st mortgage.	Iron R.R.	13	13	123,700.00					
50,000 00	7				1st mortgage.	Kentucky Cen. 2d Div...			719,500.00					
700,000 00	7					Knoxville & Kentucky...								
						Laurens (S. C.) R. R.	32	32	106,000.00			23,233.59	14,233.59	
						Louisville & Nashville...	184	184						
					1st "	Lowell & Lawrence...	12 3/5	12 3/5	300,000.00			50,224.71	14,149.13	8 pr. ct.
218,000 00	7			1866	2d "	Mad River & Lake Erie...			2,697,000.00			587,236.57	162,277.50	10 pr. ct.
1,000,000 00	7			1873	2d "	" " "			2,697,000.00					
1,000,000 00	7				1st "	Manchester & Lawrence...	26	26	1,000,000.00					\$24,060
2,000,000 00	6			1874	1st "	Marietta & Cincinnati...								
2,500,000 00	7			1867	1st "	Mexican Gulf R. R.	27	27						
2,000,000 00	7 and 8			1881	1st mortgage.	Milwaukee & Horicon...	30	30						
60,000 00	8			1868	1st "	Mineral Point R. R.	32	32						
420,000 00	8			1884	2d "	" " "	32	32						
320,000 00	8			1860	1st "	Mobile & Ohio...	497	497	10,000,000.00			253,498.95	162,802.24	
6,000,000 00	7			1869	1st mortgage.	Nashua & Lowell R. R.	15	15	600,000.00			191,732.42	55,501.74	7 pr. ct.
2,356,000 00	7			1873	1st mortgage.	New Haven & North'm'n	55	55	922,500.00					2 pr. ct. 6m
936,000 00	7			1864	2d "	N. Y. & Harlem R. R.	123	123	5,717,100.00			1,040,593.26	324,891.57	
411,700 00	6			1863	1st "	" " "						245,713.00	64,678.71	\$37,692.30
500,000 00	7				1st "	N. Y., Prov. & Boston...	50	50	1,508,000.00			120,571.50	51,544.40	
300,000 00	6				2d "	N. Lon., William'tu & Pal.	66	66	1,700,000.00					
						Pontchartrain R. R.	5	5	500,000.00					\$25,000
1,500,000 00	6			1873	1st mortgage.	N. O., Opel'o's & Gr. L. West.	62 1/2	62 1/2	6,000,000.00			116,795.00		7 pr. ct.
1,000,000 00	6			1873	2d "	N. Y. & New Haven...	103 1/2	103 1/2	3,000,000.00			1,007,666.48	266,118.82	
2,000,000 00	7			1866	3d "	" " "								
1,500,000 00	6			1859	1st mortgage.	Northern (N. Y.) R. R.	118	118	2,000,000.00			600,000.00		7 pr. ct.
3,000,000 00	5			1877	1st mortgage.	North Missouri R. R.	19 1/2	19 1/2				25,176.74		
419,500 00	6			1860	1st mortgage.	Norwich & Worcester R.R.	60	60	2,111,500.00			304,236.33	88,458.56	2 1/2 pr. ct.
221,800 00	6					Ont'nsb'g, Clay't'n & Rome								
				1866	1st mortga. e.	Ont'nsb'g, Clay't'n & Rome	94	94				289,090.10		
400,000 00	6			1875	2d mortgage.	Oran'je & Alexandria R.R.	83 3/4	83 3/4	2,987,500.00			276,539.62	137,875.43	5 pr. ct.
1,200,000 00	7			1868	1st mortgage.	Peoria & Bureau Val. R. R.	47	47	1,500,000.00					
300,000 00	8			1873	1st "	" " "								
350,000 00	6			1861	1st mortgage.	Philadelphia & Trenton...	28 1/5	28 1/5	1,000,000.00					6 pr. ct.
800,000 00	7			1864 to 1874	1st "	Portsmouth & Concord...	47	47						
1,567,000 00	6			20 years.	1st mortgage.	Potsdam & Watertown...	76	76	2,000,000.00			68,525.42		
						Rutland & Washington...	62 1/2	62 1/2	950,000.00					
						St. Louis & Iron Moun. R.R.	86	86	6,000,000.00					
					1st mortgage.	Salem & St. Louis R. R.	168 1/2	168 1/2	400,000.00					
					1st mortgage.	Snd'sky, Maus'fd & New'k	116	116						
					1st "	Sullivan Railroad...	26	26	500,000.00			75,246.06	19,050.64	
					2d "	" " "								
					1st mortgage.	Tennessee & Alabama...	145	145				39,586.44	17,378.08	
					1st mortgage.	Terre Haute & Richmond...	73	73	1,294,450.00					11m. 12 pr. ct
					1st "	Folledo, Wabash & Western	212	212						
				1861	1st mortgage.	Troy & Boston...			1,000,000.00					
				1849	2d "	" " "								
				1873	3d "	" " "								
					1st, 2d, 3d "	Vicksburg & Jackson...	46	46						
						Virginia & Tennessee...	215	215	3,000,000.00			322,048.60	165,576.24	
						Westchester (Pa.) R. R.	31	31	165,000.00					2 pr. ct.
					1st mortgage.	Wilmington & Manchester	171	171						
					2d "	" " "								
						Winchester & Potomac...	22	22						
						Worcester & Nashua...	45 60	45 60						



## CINCINNATI STOCK SALES.

AT THE STOCK BOARD.

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending March 18, 1857.

## BONDS.

\$10,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds.	67
2,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds.	80½
5,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds.	48
1,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. bonds.	60
1,800 Ohio Central R. R. Co. 7 per cent. 4th Mortgage Bonds.	30
2,000 Indiana Central R. R. Co. 10 per cent. Income Bonds, due in '58.	94
3,500 Marietta & Cincinnati R. R. Co. 7 per cent. Income Bonds.	40
1,000 McCrackin county, Ky., 6 per cent. Bonds.	62½
2,000 City of Cincinnati 6½ per cent. Bonds	89
1,200 Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds due in '60 & '61	90
700 Ohio & Mississippi R. R. Co. Scrp.	28

## STOCKS.

284 Shares Ohio & Miss.	10 and int.
200 " do	10½ "
50 " Little Miami.	91
100 " do do	91½
35 " do do	92
20 " Columbus & Xenia.	91
350 " Southern Pacific.	60
28 " Indiana Central.	50
16 " Cin., Ham. & Dayton.	70
90 " Cin. & Chicago.	2½ "
100 " Mad River & Lake Erie.	15
200 " Junction (Ind.).	8
40 " Marietta & Cincinnati.	17½ "
12 " Cleve. Col. & Cin.	102
5 " Ohio Life Ins. & Trust Co. Bank.	97

## MONETARY AND COMMERCIAL.

Our review of the present week presents no abatement in the stringency mentioned in our last. Business is active, and our banks have not the facilities for accommodating their customers to the extent of their wants. Hence much good paper is offered outside, at rates ranging from 12 to 18 per cent.

Eastern Exchange, which has stood for several weeks at  $\frac{1}{2}$  to 1 per cent., fell on Monday to  $\frac{1}{4}$  to  $\frac{1}{2}$  premium, and is still quoted at that. This is a good sign, and is indicative of a cessation of the extreme demand, and consequent drain of money from west to east.

Our city is full of strangers, and business more active than we have seen it for months. Country merchants who have been trying eastern and other markets, seem this spring to be satisfied that they can do better here than elsewhere, and hence they come.

The news from New York is squally. Stocks are taking a downward movement, with the New York & Erie at the head of the list.

## NEW YORK STOCK SALES, March, 10, 1857.

\$1,000 Indiana State 5's.	85
16,500 Virginia 6's.	92
5,000 Mississippi State 6's.	83½
6,000 California 7's, 1875.	65
15,000 New York City 5's '98.	94
3,500 N. Y. Central 6's.	90½
11,000 Erie R. Co. Bonds, '71.	80
5,000 Ill. Cent. R. R. Bonds.	101½
9,000 do do do	101½
100 Shares N. Y. Central R. R.	89½
200 " do do	89
10 " New Jersey R. R.	121½
300 " Erie R. R. stock.	53
200 " Harlem.	14
12½ " Reading.	80
60 " Mich. Cent.	96½
560 " Mich. So. & No. Ind.	73
25 " Panama.	95½
9 " Illinois Central R. R.	137
100 " Cleveland & Pittsburg.	55
99 " Cleve. C. & Cin.	103
50 " Galena & Chicago.	103½
350 " Cleveland & Toledo.	73
350 " Chicago & Rock Island R. R.	104½
100 " Mil. & Miss.	74½
40 " Milwaukee & La Crosse.	76

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON,

no13

10 Wall st., near Broadway, New York.

## Sonora Exploring and Mining Co.

THIS company own the old and well known Rancho of Arivaca, in the Gadsden Purchase, containing nearly 20,000 acres of land and twenty-five well known silver mines, that were worked previous to the Apache War and known to be of great richness. They also own the old SALERO and OJERO mines, opened originally by the Spanish Jesuites, and only abandoned on account of the Indians. They have in all FORTY-NINE veins of silver ore and besides lead and copper.

As Agent for the above Company, I offer for sale a limited amount of the stock of the Company for a short time only.

## MAPS, PLANS, REPORTS,

And other information can be seen at my office, corner of Third and Walnut streets, Odd Fellows Building, Cincinnati, Ohio. EDGAR CONKLING.

## RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.] J. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS. DOREMUS &amp; NIXON, No 21 Park Place, and 18 Murray st., NEW YORK, IMPORTERS

OF

Plain and Figured Mohair Plush.

Printed &amp; Unrent do., Entirely New Designs;

MOQUETTES &amp; VELVET CARPETS;

Enameled Cloth, for seats &amp; backs of Cars;

ROPE MATTING, Every Width;

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION &amp; MATTRESS FILLING.

N. B. We have the Plush in bond for exportation sep18 DOREMUS & NIXON.

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.). 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

aug 14 1y P. DUDLEY,  
President of the Board.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
feb19-1m 9 South William street, N. Y.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by  
July31 VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

## THOMAS D. STETSON, Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,

No. 35 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc23

## CONSULTING ENGINEER.

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. OORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

## RAILWAY AGENTS

AND

## COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

## RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard; 500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern, deliverable in bond, or duty paid. For sale by

feb5-1f THEODORE DEHON,  
10 Wall st., near Broadway, New York.

## SAFETY &amp; ECONOMY.

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point for which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

## T. F. RANDOLPH &amp; BRO.

Mathematical Instrument Makers,

N. W. Cor. 5th &amp; Walnut sts.,

CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR

RAILROADS, STEAMBOATS, AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 1: No. 14 Main street, Cincinnati, O.

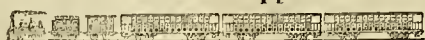
## WOOD ENGRAVING.

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan8 1y 119 Walnut st., Odd Fellows' Building



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12:30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6:30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton.

UPA Steamer leaves Racine for Chicago every evening at 10:30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Asst. Sup't.

## Harlan & Hollingsworth,

WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freight.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## WASON'S

## CAR MANUFACTORY,

Near the Pittsburgh R. R. Shops,

CLEVELAND, OHIO.

Passenger, Baggage, Freight, Dumpers, Hand Cars, &c.,

Of the best quality in all respects, style, workmanship and material, made to order with promptness. Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

CHARLES WASON,  
Late of the firm of T. & F. Wason, Springfield,  
Massachusetts.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,

PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.,

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns,

Braas, Bronze, and Silvered Car Side Lamps and Caudlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS.

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do.,

Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks, CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED.

## E. MENDENHALL,

MAP, BOOK & PRINT SELLER,

Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,

Geological and Astronomical Charts, Globes,

MICROSCOPES, TELESCOPES

DRAWING INSTRUMENTS, &c.

Publisher of the

Railway Map of the Western States,

In Sheet or in Pocket Case:

The LARGE SECTIONAL and RAILWAY MAP of OHIO

THE LARGE MAPS OF CINCINNATI, and HAMILTON CO.

OHIO, and the TOWNSHIP MAPS of INDIANA and IOWA

MAPS OF EVERY DESCRIPTION.

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention.

LEE & LEAVITT,

15 Walnut st., Cincinnati.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c.

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOY'S

METALLIC SELF ADJUSTING CONICAL PACK-

ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

64 Broadway, N. Y.

Ncv

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

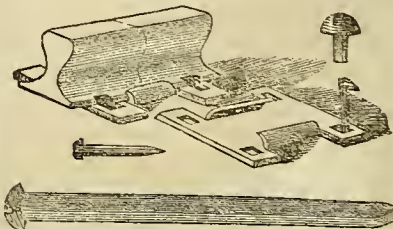
Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists.

Mines explored, new Works laid off, and Geological plans prepared.

mar 1-17

## GREAT WESTERN

## Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

LEE & LEAVITT.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices, No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

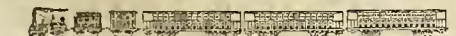
W. M. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

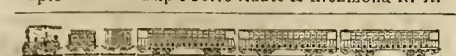
Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville, for Vincennes and Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap 10 Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

oc 23-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS, To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jy 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**Freight.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan 2

1856.

1856. Winter Arrangement. 1856

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST.

## FOUR DAILY TRAINS

Leave the Sixth Street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Springfield for Columbus; at Urbana with Columbus and Piqua trains East and West; at Bellefontaine for Crestline, Pittsburgh, Philada.; at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities.

Same train connects at Dayton for Dayton & Michigan Road to Troy, Piqua, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points up the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 5:40 A. M., and Chicago 2:00 P. M. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M. and 5:30 P. M.

For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

HENRY O. AMES, Sup't.

The Omnbuses will call for passengers by leaving their names; either of the Ticket Offices. dec 21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash, and Western Road for Lago, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R., make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Frtght. Ag't.

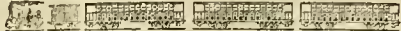
Indianapolis, Sept. 16, 1856.

[mh 20-1y.



## KENTUCKY LOCOMOTIVE WORKS

CORNER OF KENTUCKY AND TENTH STS.  
LOUISVILLE, KY.



THE Proprietors of the Kentucky Locomotive Works would respectfully inform Railroad Companies and the public generally that, having completed their establishment, they are now prepared to receive and execute orders with fidelity and dispatch.

They will contract for

**Locomotives, Passenger, Baggage, Freight, Gravel and Hand Cars,**

of every style and pattern, as well as all kinds of Stock and Machinery required for railroads.

Particular attention will be paid to repairing, for which they have every facility.

They are also prepared to contract on favorable terms for building all kinds of Machine Tools, such as Turning Engines, Lathes, Planers, Drills, Slotting, Splitting, and Shaping Machines, of every variety of pattern.

Having also a large FOUNDRY connected with the establishment, orders for Castings are solicited, and will be filled with promptness.

Car Wheels of any pattern can be furnished in short notice. Double and single plate and Spoke Wheels of all sizes constantly on hand.

Communications or orders must be addressed to  
OLMSTEAD, TENNIS & PECK,  
Louisville, Ky.

**Norris' Locomotive Works**



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
J. 27. RICHARD NORRIS & SON



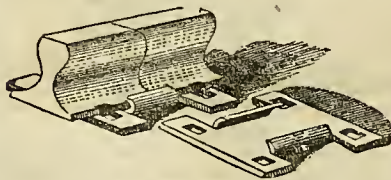
## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
**DRILL THE TUBE-PLATES**  
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tuires.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

## RAILROAD SPIKES.



WROUGHT IRON

## Chairs and Fastenings.

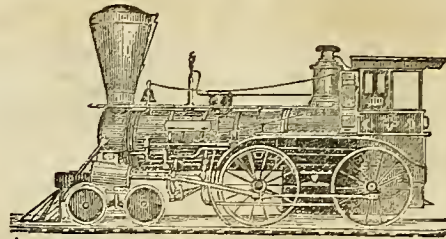
THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch.

J. HOPKINSON SMITH,

No. 25, South Charles st.  
Please direct the name in full.  
Baltimore August 31-+

## LOCOMOTIVE WORKS.



**NILES & CO.,**

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

## RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

## A. B. LATTA'S

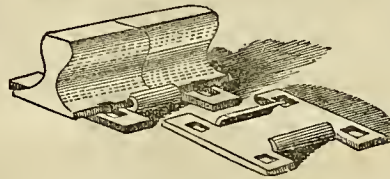
## Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

apl7 A. B. & E. LATTA.  
J. D. GREEN. C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

south Side Congress St., East of Canal,  
CINCINNATI, OHIO.

**J. B. GREEN & BRO. PROPRIETORS,**  
WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

## Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

Feb. 14 ly.

## THE SCHENCK MACHINERY DEPOT

AND

**Leather Banding Manufactory,**  
No. 163 GREENWICH STREET,  
NEW-YORK,

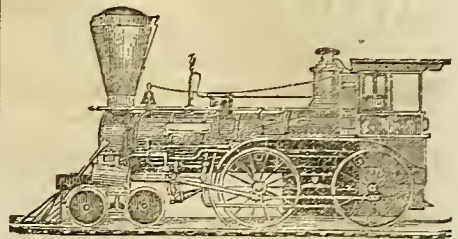
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

## Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR  
Ang. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



THE undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap 20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers, Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws.

## LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car, Hand, and Signal Lanterns.

## Cotton Duck for Car Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver Plated Trim mings for Windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes. Silver Plated and White Metal Letters. Engine and Signal Belts, anti-friction or Babbitt Metal.

## Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other Articles pertaining to Cars.

ALBERT BRIDGES,  
Late Davenport & Bridges, Car Manufacturers.  
Cambridgeport, Mass.

ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass  
toct

## GEO. D. WINCHELL & BRO.,

172 Elm Street, between 4th & 5th,

CINCINNATI, O.,

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

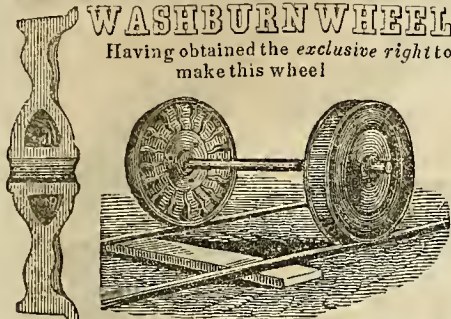
Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute.  
June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of those have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL.

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**  
We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,  
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* **JOSEPH DAVENPORT.**

### S. C. THOMSON & CO

MANUFACTURERS OF

### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n24 NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or  
Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

### ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES

NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

### IRON BOILER FLUES PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

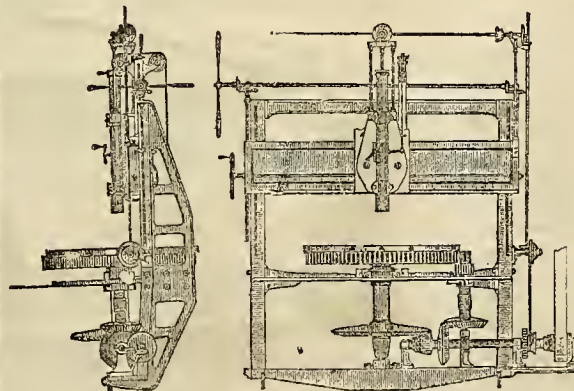
**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA. [209

## NILES' WORKS.

### FOUNDERS AND MACHINISTS,

EAST FRONT STREET, CINCINNATI,



Manufacturers of

### TYRE LATHES,

Of the most approved plan.

### HORIZONTAL

### FACE PLATE LATHES,

OF VARIOUS SIZES, TO SWING  
From 40 inches, to 12 feet.

### PLANING MACHINES

LARGE & SMALL.

## MARINE & STATIONARY ENGINES.

BOILERS OF EVERY DESCRIPTION.

### HEAVY FORGINGS,

IRON AND BRASS CASTINGS, &c., &c.



**Parry's Anti-Friction Box,**

PATENTED IN 1853.

THE attention of the public is directed to this invention, for which patents have been granted by the United States, England, France and Belgium—it is designed to relieve all species of pivot or end friction, and is especially adapted to receiving the thrust of propeller shafts, pivots for railway turn tables, steps for turbine wheels, mill stones, center plates for eight wheel cars, steps for heavy mill shafting, and for all kinds of presses where the power is received by the application of a screw, the gain of power by the adoption of this box is immense.

Contracts will be taken for erecting Railway Turn-Tables, (which will cost no more than a wooden structure), and their durability will be guaranteed for twenty years without repairs.

Applications will be received for the sale of State Rights for the use of this invention.

For further information, apply to

JOHN RICE & CO., Patentees.

90 South Fourth street, Philadelphia.

READ THE FOLLOWING CERTIFICATES.

OFFICE OF THE PENNSYLVANIA CENTRAL R. R.,  
PHILADELPHIA, June 9th, 1855.

MR. PARRY—

DEAR SIR:—We have your Anti-Friction Pivot in use under Turning Tables, on this Road. They require no gearing or machinery, but simply the strength of one person to turn them when loaded with engine and tender. I should judge they will last for years without repair—an important item in such structures.

Yours respectfully, J. EDGAR THOMPSON,  
Civil Engineer and President.

I fully concur in the above and foregoing statement, having examined the Turn-Table and witnessed its operation

WILLIAM B. FOSTER, JR.,  
Civil Engineer.

SUPERINTENDENT'S OFFICE,  
TRANSPORTATION DEPARTMENT, PENN'A R. R.,  
ALTOONA, Blair Co., Pa., Nov. 11, 1854.

MR. PARRY—

DEAR SIR—The Turn-Table in the new engine house at Altoona is constructed of boiler plate, and is fifty feet in diameter. The center bearing is an application of your Improved Anti-Friction Box, and thus far has given evidence that it is all that its proprietor claims for it—the very best center bearing that can be found on that purpose.

Very respectfully,  
H. J. LOMBAERT, Superintendent,  
ENGINEER DEPARTMENT, NORTH PA. R. R.,  
PHILADELPHIA, Feb. 10, 1855.

I am so well satisfied of the excellency of Parry's Anti-Friction box, that I have purchased for the North Pennsylvania Railroad Company the right to use it, and Messrs. Bancroft & Sellers are now building two locomotive engine turn-tables of cast iron for me, one of twenty-five feet, and one of forty-seven and a half feet diameter, to which these boxes are to be applied. I have no doubt whatever that the invention is a very valuable one, and it is simple and not liable to get out of order.

EDWARD MILLER, Chief Engineer.  
READING, June 2, 1853.

There are two sets of the above rollers in use on the Philadelphia and Reading Railroad; one under a heavy twenty-five foot iron turning platform, for large locomotive engines, and the other under a six ton crane.

Both have been in operation for some time, and have proved satisfactory; moving with less friction than any other plan of bearing which I have seen, and requiring no repairs and very little grease or oil.

I consider them a most useful invention; as greatly decreasing friction on all heavy bearings for either vertical or horizontal shafting machinery.

Signed, G. A. NICHOLS,

Engineer and Superintendent Philadelphia and Reading Railroad.

BORDENTOWN, N. J., Nov. 22, 1854.

In July, 1853, I attached Parry's Anti-Friction Box to the shafts of steam propeller Amboy; it receives the back and forward thrust of the wheels, each eleven feet in diameter. I am convinced, by thorough practice, that it is the best thrust bearing that can be used; it does not heat or corrode, requires very little oil, and I think a decided gain in power or usefulness, over any rubbing surface that may be sufficient to resist the pressure of the forward thrust of a propeller shaft.

ROBERT ALLEN,

Superintendent of Steamboats for Camden and Amboy Railroad Company.

PHILADELPHIA, February 19, 1855.

GEO. T. PARRY, Esq.—DEAR SIR:—I have examined your Anti-Friction Box for its application more particularly to the purpose of turn table pivots, as well as steps for upright shafts, and difficult as it is to demonstrate as to the perfection of its working, I find its practical applications to be nearer to what has been long desired and sought than anything heretofore offered for such purposes. Great difficulty has ever existed with turn-tables in obtaining a pivot that would give freedom of motion without constant attention and adjustment, and even with the most approved, expensive gearing has been rendered necessary.

The table twenty-four feet in diameter, made by Bancroft & Sellers, of this city, being balanced on its center, I found it required my entire weight on the extremity of one of its arms to destroy its equipoise, while with the power of my little finger I could turn it horizontally upon your box. I therefore take pleasure in recommending its use, as the most perfect pivot and step that has ever been presented to the public.

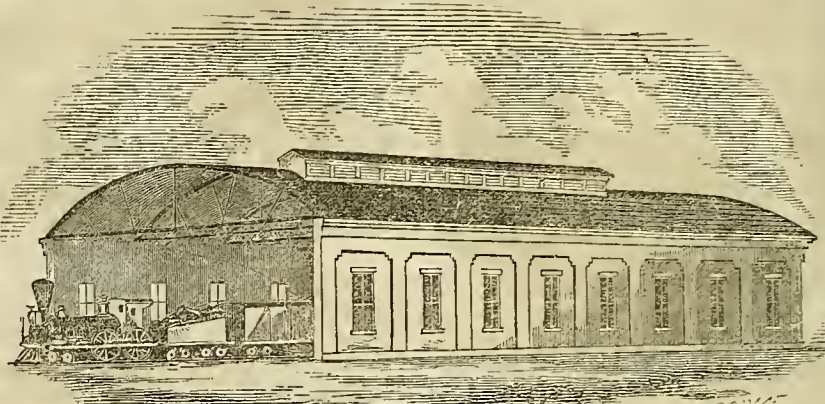
Very respectfully,

STRICKLAND, KNEASS, Civil Engineer.

# Moseley's

## TUBULAR

### WROUGHT IRON ARCH ROOFS.



Office, No. 57 West Third Street,  
CINCINNATI, OHIO.

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of iron supporting now in use, and no more than good wooden trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

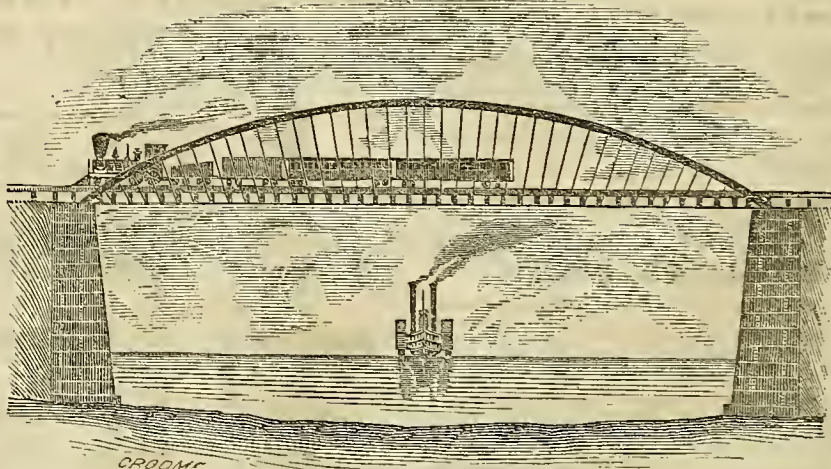
MOSELEY, WINSTON & MOSELEY.

January 1st, 1856.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *plate iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by *responsible obligations*.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

THOS. W. H. MOSELEY.

Principal Superintendent and Engineer







holders—of all the principal officers of the Company, viz.: President, Vice President, Treasurer, Secretary, Auditor, and an Examining Committee, or Committee on Accounts, to report directly to the stockholders.

*Thirdly*, For the appointment by the Board of an Executive Committee of three or five to be suitably paid for their services, whose duty shall be to attend at the office regularly every day, or every other day, to advise with the officers, and decide upon any matters requiring action during the intervals of the meetings of the Board.

*Fourthly*, Make it the duty of the officers to report to, and consult with the ex-Committee, at each meeting; for this Committee to report to the Board monthly, or oftener; and for the Board to report quarterly or semi-annually to the stockholders.

*Fifthly*—Provide that no construction of new works, or other contract, (except for necessary repairs,) exceeding \$20,000 in amount—or a term of 12 months—shall be ratified, or a dividend declared, without the approval of the stockholders, at a regular or special meeting, duly called.

Other provisions, adapted to the circumstances and wants of each particular Company, might be introduced.

Some objections may doubtless be raised to this programme; but some experience, and a pretty close and extensive observation, has demonstrated the necessity of some such measures to protect the interests of stockholders, and to redeem our railroad securities from their present depressed and rapidly sinking condition in the market.

While this more immediate supervision and control of the affairs of the Company by the stockholders, in general meeting, would tend directly to restore public confidence, it would at the same time secure the benefit of any talent or experience possessed by the stockholders at large, and incidentally discover to the corporators who among their number are most competent to manage the affairs of the Company; and thus always secure the best and most efficient men in the Board.

For ourselves, we believe that the remedy proposed is in the hands of the stockholders, if they choose to avail themselves of it. And our railroad interests never will be safe until the owners of the property, the actual holders of the stock, take sufficient interest in it to inquire at least how its affairs are managed. The merchant who trusts entirely to his clerks, and with increased confidence, never takes an account, would soon feel the effects of his blindness. And so must Companies. Many have already suffered, and many more will suffer from the utter inefficiency of those who should take sufficient interest in their concerns to, at least, attend the few meetings that are now held.

#### CINCINNATI SPRING GAUGES FOR LOCOMOTIVES.

We take pleasure in calling the attention of our readers to the advertisement of Messrs. J. M. Brown & Co., manufacturers of Improved Steel Spring Gauges—the best article now used on Locomotives. We have had one of these gauges in use, and testify to its accuracy and delicacy of movement.

When we consider the immense pressure that must be carried in locomotive boilers to insure their satisfactory performance, the dangers of imperfect work and material, and the constant

tendency of our people to excessive performances of every character, it will be readily conceded that a monitor of danger in the shape of a reliable steam gauge, is an indispensable appendage. It should be on every locomotive, and we cannot conceive a well-ordered road that is not fully equipped with this indispensable article.

Messrs. J. M. Brown & Co. deserve the credit of being the pioneer gauge makers of the West, and their articles, where used, have given good satisfaction. Among their customers we notice the Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston—all well known and well managed.

#### LITTLE MIAMI AND MARIETTA RAILROADS.

We learn, that on Tuesday, a final contract was consummated, between these two Companies, which will be advantageous to both the Stockholders and the public. The arrangement, as we understand it, is this. The Marietta Road is to have the use of the Little Miami track from Lovelands to Cincinnati, for its own trains—thus making it a separate and independent road to Cincinnati. It is also to have Depot ground. The Time Tables and details necessary to safety and convenience, are to be arranged by the two Superintendents, and by joint Committees of the Companies. In consideration of these rights and privileges, the Marietta Road are to pay \$60,000 per annum, in monthly instalments. This sum will probably be an equivalent for the use of this portion of the track.

We understand that Mr. CLEMENT, who has acquired so much distinction on the Road, will remain. He has been urged to go on to the Ohio & Mississippi; but cannot be spared from his present place.

We would call attention to the advertisement of the Agent of the Sonora Exploring and Mining Co., in another column, as a matter of great interest, not only to the parties who become interested, but also to the country at large.

#### FINANCES OF THE STATES.

The editor of the *Bankers' Magazine*, No. 162 Pearl street, New York, has commenced in that work a series of valuable papers, showing:—I. The Finances of the States; their Funded Debt; Annual Interest; Taxable Property; Annual Revenue and Expenditure for Each Year, from 1833 to 1856, showing clearly the progress of the State in property, revenue, etc. II.—The Foreign Exports and Imports, Tonnage, etc., of each State for each Year, 1830 to 1856, showing their progress from year to year. Of the latter series, those of the States from Maine to Georgia have been published. Of the former series we annex the table relating to the progress of the State of Ohio since the year 1833, furnished by the Auditor of that State.

Fiscal Year	Foreign & Domestic State Debt	Ann. Int. on State Debt	Taxable Property of State, Real & Pers.	Gross Revenue of State	Expenditures of State
1833	\$4,750,000	235,000	78,019,526	997,734	1,887,739
1834	4,691,669	233,500	75,593,212	1,011,320	2,773,949
1835	4,979,327	291,757	91,428,016	201,760	235,265
1836	5,857,233	351,470	85,812,382	501,669	269,660
1837	6,136,516	368,190	91,591,745	327,868	277,560
1838	6,305,790	344,248	106,053,018	451,757	324,022
1839	10,030,162	601,809	111,224,197	655,905	652,223
1840	11,012,230	770,222	112,037,861	366,498	295,600
1841	15,573,354	934,401	128,753,157	255,852	192,279
1842	16,947,325	1,016,629	132,243,475	292,324	227,663
1843	18,668,321	1,120,099	123,663,794	227,276	273,462
1844	19,276,721	1,167,444	136,142,666	371,963	229,141
1845	19,251,180	1,140,706	144,160,469	1,353,556	1,669,357
1846	19,246,062	1,164,260	150,293,132	2,061,284	2,639,629
1847	19,238,477	1,163,509	409,897,579	2,648,765	3,397,665
1848	19,173,223	1,159,893	419,897,206	2,473,762	3,137,194
1849	19,036,200	1,147,854	429,665,629	2,511,119	2,383,135
1850	18,744,594	1,124,526	429,676,340	2,526,518	2,961,581
1851	18,524,893	921,343	462,148,620	2,878,656	2,696,369
1852	15,520,768	919,496	507,581,911	3,016,403	2,736,460
1853	15,218,129	901,191	593,396,846	2,865,907	2,696,118
1854	14,524,856	859,596	660,139,982	3,715,113	3,493,253
1855	14,008,295	829,253	860,477,354	3,631,173	3,212,444
1856	14,068,274	829,253	820,661,037	3,588,553	3,712,266

Since the year 1840-2, when the taxable property of Ohio was only \$132,000,000, and the annual interest on the State Debt was paid with extraordinary exertions and sacrifices, their property has increased 500 per cent., or over \$800,000,000—the annual interest being now paid with light taxation.

#### COVINGTON AND CINCINNATI BRIDGE CO.

We have not been favored with a copy of the report of this company, which was made to the stockholders March 2, 1857, but take from the *Covington Journal* the following extracts:

**PROGRESS OF THE WORK.**—On the 1st of September last, the amount of stock then subscribed being \$314,000, the work for the foundations of the towers was commenced. Though laboring under the disadvantage of not being able to procure promptly suitable pumping apparatus, with which to free the pits of water, and the further difficulty of having to haul timber for the foundation distances ranging from five to twenty miles, the excavations were made in good season—on the Ohio side to the depth of seven feet below the bed of the river, and on the Kentucky side to the depth of five feet below the river bed. Foundation timbers from ten to fifteen inches thick were then laid down horizontally in tiers, each course crossing another course at right angles, and the whole fastened together with bolts of inch iron, each twenty inches long. Six courses of timber compose the foundation on the Kentucky side, and eleven courses on the Ohio side. This timber, being below the line of low water, can never decay. Upon this timber 1278 perches of masonry have been laid—871 perches on the Kentucky side, and 407 perches on the Ohio side. This masonry is composed of large blocks of Dsytan limestone, laid with hydraulic cement. Substantial wooden caissons, to protect the foundations from drift, ice, &c., have been constructed; and the company has built two blacksmith shops, one in Covington and one in Cincinnati; also a carpenter shop in Covington.

**RECEIPTS AND DISBURSEMENTS.**—The amount received from instalments, &c.



other sources, to Mar. 2, was \$77,009.97  
Disbursements to same date 74,459.90

Bal. on hand - - - - - \$2,550.07

In addition to the disbursements there are liabilities amounting to \$20,326.57. Deduct funds on hand from this, and there is left \$17,776.50. Deducting the value of materials not yet used and tools on hand, from the gross expenditure, and the actual cost of the of the work executed up the date of report is found to be \$69,860.47.

**RESOURCES.**—The gross amount of stock now subscribed is \$410,400. Contracts have been made for work and materials to the amount of \$32,700, payable in the bonds of the Company. Propositions from responsible parties for furnishing material to an amount exceeding \$20,000, are now open for acceptance; and the Board have reason to believe that additional stock and bonds to the amount of at least \$50,000, can be disposed of in a similar manner during the progress of the work. It is expected that the additional cash subscriptions to the amount of \$100,000, will be taken during the present year.

**COST AND PLAN.**—The estimated cost of the work is \$600,000.

The towers will contain 30,000 perch of masonry. They will be constructed entirely of stone; they will be eighty-two feet by fifty-two feet at their bases, and fifteen by thirty-three at their tops, and two hundred and eleven feet high above the surface of extreme low water. The southern side of the northern tower is located thirty-five feet north of the line of low water on the Ohio shore. The distance between the towers at the surface of the ground will be one thousand and five feet. The masonry will be carried up vertically as it has been commenced, with offsets about every forty feet. The bridge floor will strike the towers at an elevation of about one hundred feet above the extreme low water.—At this point there will be an opening in each tower to admit the roadway and side walks of the bridge. Said opening will be thirty feet wide and seventy-five feet high, surmounted with an arch. The top of each tower will be finished with a cornice and embattlements.

Work will be resumed at an early day; and it is the purpose of the Directory to push forward the undertaking to its earliest completion.

#### BREVITIES.

—**ROCK ISLAND BRIDGE.**—The Rock Island Bridge Company has commenced suit against the Captain of the steamer *Effie Aston*, which was lost in attempting the passage of the bridge, and took fire, and caused the destruction of a portion of the bridge. The damages claimed are \$200,000. This is probably designed as an offset to the suit of the Captain against the Bridge Co.

—**ILLINOIS CENTRAL R. R.**—We learn that Lieut. Silas Bent, of St. Louis, has been appointed Superintendent of this road. Lt. Bent was for many years in the United States Navy, and accompanied Com. Perry in his expedition to Japan.

—**ROCK ISLAND & ALTON R. R.**—A railroad is to be built from Rock Island to St. Louis under the charter granted to the above road.

—**MARINE DISASTERS IN DECEMBER.**—The marine disasters for the month of December, 1856, as given in the *Journal of Commerce*, New York, include a total loss of 54 vessels. The value of the lost vessels and cargoes exceeds one and a half million dollars.

—**McCONNELLSVILLE, O.**—The value of the produce and merchandise bought and shipped from this point in the year 1856 is stated to be \$73,962.96. In the list of articles making up this aggregate we notice 111,772 lbs. of butter and 68,800 dozen eggs. Four years ago the great bulk of this large aggregate was wasted, or brought to no profitable employment. This shows what enterprise can do in developing the resources of a county.

—**MISSISSIPPI, OUACHITA & RED RIVER R. R.**—The Directors of this company have appealed to the citizens of New Orleans for aid to build their road.

—**IRON COMPANY AT WHEELING.**—We see a notice of a new iron manufacturing project at Wheeling. The company own 10,000 acres of mineral land within 42 miles of the city. The following is the estimate of cost of the metal from their ores:

Two tons and one-half of ore raised and delivered on board the cars, at \$1.25 per ton will be . . .	\$3.12
Transportation to Wheeling, at 84 cents per ton of ore, will be per ton of iron . . .	2.10
Coke, made from three tons of Wheeling coal will be, at outside cost . . .	3.00
Cost of bank expenses, wages of employees, and interest on stock . . .	6.78

Total cost of a ton of metal . . . \$15.00

—**MAYSVILLE & LEXINGTON R. R.**—It is stated that the present owners of this unfortunate concern are anxious to form a new company, putting in the old road as stock, at a low valuation, and that less than a million dollars will complete the road from Maysville to Lexington.

—**SAN ANTONIO & MEXICAN GULF R. R.**—A doubt having arisen as to whether this company would be entitled to the benefit of the sixteen section law, a letter was addressed to the Governor and the Attorney General of the State of Texas. In reply to this the Governor says: "I can come to no other conclusion than that it was the intention of the Legislature, when it passed the supplemental act of the 20th of February, 1856, to give the company the benefit of the sixteen section law, as it is called, if it completed twenty-five miles of its road by the 1st of July, 1857."

—**GALENA & ROCK ISLAND R. R.**—A charter has been granted by the Illinois Legislature to the above named company.

—**BALTIMORE & OHIO R. R.**—This company is now erecting a building 72 feet long and 60 feet wide, on the northern front of its spacious depot, for the offices of the company. When this improvement is completed the company will have what it has long needed—spacious and convenient offices.

—**PITTSBURG, MAYSVILLE & CINCINNATI R. R.**—At the meeting of the stockholders of the Pittsburg, Maysville & Cincinnati Railroad Co., held at McConnellsville, on Tuesday, March 2d, the following gentlemen were elected Directors of said company:—Jno. Fordyce, Harrison Secrest, Joshua Gregg, Wm. Lawrence, S. Stranathan, Joshua Davis, James McConnell.

—**COAL OIL AND MINING Co.**—A company has recently been organized at Maysville, Ky., for the manufacture of coal oil, burning fluid, paraffine, etc., from cannell coal. The following gentlemen are the Directors: Messrs. Charles B. Coons, Thos. J. Pickett, Thos. A. Matthews, Gen. Harrison Taylor and James Barbour, of Maysville; Rev. Geo. W. Coons, Wm. S. McKibben, S. W. McKibben and F. L. Cleveland, of Augusta, Ky.; Marcus A. Finch, of Covington, Ky.; and Col. Joseph J. Davis, of Cincinnati, Ohio. Charles B. Coons is the President and general business manager, and the style of the firm is Coons, Pickett & Co.

This company have purchased the well-known coal mines of Col. Stockton, in Western Virginia, on the east bank of the Kanawha river, about 26 miles above Charleston and 9 miles below the falls in that river.

—**PEAT BEDS IN WISCONSIN.**—The peat beds in the vicinity of Madison are attracting considerable attention. They are located upon lands belonging to Cols. W. B. & G. H. Slaughter and Wm. Green, lying six miles west of that town, and immediately upon the Milwaukee & Mississippi Railroad. There are three irregularly shaped beds, contiguous to each other, which lie in depressions of the surface, and the whole outline gives unmistakable evidence of having, at a remote period, been covered with water, although the growth and decay of the peat moss, and the peat formation, is consequent upon the subsidence of the waters. A recent survey of the beds by the County Surveyor, Mr. Hough, gives the following results:

No. 1, about 40 acres, average depth 15 feet . . .	204,187
No. 2, about 50 acres, average depth 2½ feet . . .	59,187
No. 3, about 25 acres, average depth 10 feet . . .	85,078

Total tons . . . 348,800

—**ARTESIAN WELL.**—The Artesian well at Austin, Texas, has now been sunk to the depth of two hundred feet, at a cost of one thousand two hundred and sixty-one dollars, but the water is still in expectancy. The soil, to the depth of one foot, was found to rest on a stratum of limestone thirty-four feet thick; next was found a formation of marble thirty-four feet thick, perfectly solid; next a bed of blue clay, or marl, thirty-six feet thick; next a sheet of hard rock five inches thick; next a cretaceous formation, with pebbles and small shells, twenty-seven feet thick; next a stratum of mica, or iron, of the hardest texture, which is now being penetrated at the rate of only three inches per day.



# Railroad Daguerreotypes.

No. LXII.

MISSISSIPPI &amp; MISSOURI R. R.

OFFICERS.

President—JOHN A. DIX, New York.  
 Treasurer—A. C. FLAGO, "  
 Secretary—H. PRICE, Davenport.  
 Superintendent—A. DAY, "  
 Chief Engineer—B. B. BRAYTON, Davenport.

DIRECTORS.

JOHN A. DIX,  
 EBENEZER COOK,  
 WILLIAM B. OODEN,  
 GEORGE GREEN,  
 THOMAS M. ISETT,  
 F. H. TOMS,  
 N. B. JUDD,  
 WILLIAM WALCOTT,  
 CHARLES W. DURANT.

The ANNUAL MEETING of the stockholders is held on the first Monday in June.

RUNNING EQUIPMENTS.

No. of locomotives.....12.  
 Passenger cars, 1st class 10.

The following are the results of operation for the year 1856. Fiscal year ends Jan. 1:

RECEIPTS.

Passengers.....	\$167,273 35
Freight.....	132,455 57
Miscellaneous.....	3,958 63

Total.....\$303,687 55

DETAILS OF CONSTRUCTION.

Length of road.....67 miles.  
 Gauge.....4 feet 8½ inches.  
 Single track.....67 miles.  
 Sidings.....4.86 "  
 Length of rail-bars.....18 feet.  
 Weight per yard, rail.....59 lbs.  
 Kind of iron.....English.  
 When laid.....Fall of 1855.  
 Kind of rail.....T.  
 Ties.....Oak and Yellow Pine.  
 Length.....8 feet.  
 Size.....6 by 8 inches.  
 Kind of fuel.....Wood and Coal.

REMARKS.—The road was opened in January, 1856, and the business was much interrupted in the spring by land slides, &c., the road being new and the cuts narrow. We are now laying 20 miles of iron, from Muscatine towards Oskaloosa, which will enable us to run to the Iowa river in two months; and in the course of one year we shall be running to Oskaloosa. This will be a branch of the main line. The main line, from Iowa City to Council Bluffs, will be built, probably, in the course of five years, through to Council Bluffs. Our cost of operating is about 50 per cent of receipts. A dividend of 4 per cent. for the first six months was declared January 1. We have a charter for a branch from main line to Cedar Rapids, running up through the valley of the Cedar river, which will probably be built in a few years, making, in all, when completed, about 650 miles of road.

Respectfully yours,

ADDISON DAY, Sup't.

No. LXIII.

ROANOKE VALLEY R. R.

OFFICERS.

President—L. E. FINCH, Clarksville, Va.  
 Secretary and Treasurer—E. A. WILLIAMS, Clarksville, Va.  
 Superintendent—L. E. FINCH, Clarksville, Va.

DIRECTORS.

S. H. HARRIS,  
 HY. WOOD,  
 JAMES E. HASKINS,  
 R. C. NELSON,  
 JAMES WILLIAMSON,  
 A. M. MCPHEETERS.

The ANNUAL MEETING of the stockholders is held on the second Thursday in October.

The CAPITAL STOCK is as follows:

Number of shares.....	4,300.
Price per share.....	\$100.
Capital.....	\$430,000.

The DENTS of the road are:

1st mortgage.....	\$60,000.
When payable.....	1866.
Interest.....	7 per cent.
When due.....	1st May and 1st Nov.
Trustee.....	T. Carrington.
Floating debt.....	About \$15,000.

RUNNING EQUIPMENTS.

Number of Locomotives.....	2.
Passenger cars.....	1.
Baggage ".....	1.

The following are the results of operation for the years 1855 and 1856:

	1855.	1856.
Passengers and Freight.....	\$12,000	\$14,000
Mails.....	940	940
Cost of operation.....	About receipts.	

DETAILS OF CONSTRUCTION.

Length of road.....22 miles.  
 Termini.....Clarksville.  
 Gauge.....4 feet 8½ inches.  
 Single track.....22 miles.  
 Length of rail-bars.....20 feet.  
 Weight per yard.....51 lbs.  
 Kind of iron.....English.  
 When laid.....1854.  
 Kind of rail.....T.  
 Ties.....White and Post Oak.  
 Length.....8 feet.  
 Size.....6 by 9 inches.  
 Fuel.....Pine Wood.  
 Amount per annum.....1,500 cords.

No. LXIV.

TROY &amp; BOSTON R. R.

President—D. T. VAIL, Troy.  
 Treasurer—DAN'L ROBINSON, "  
 Secretary—J. S. WEED, "  
 Sup't—ISAAC V. BAKER, "

DIRECTORS.

D. T. VAIL,  
 J. S. WEED,  
 J. M. BATES,  
 E. JOHNSON,  
 S. C. DERMOTT,  
 J. B. HART,  
 J. C. HEARTT,  
 R. SAOE,  
 H. SLOCUM,  
 D. ROBINSON,  
 L. WILDER,  
 C. LANSINO,  
 J. H. WILLARD.

The ANNUAL MEETING of the stockholders is held on the second Tuesday in January.

The CAPITAL STOCK is as follows:

Number of shares.....	5,511.
Capital.....	\$1,000,000.

The DENTS of the road are:

1st mortgage.....	\$300,000.
Interest.....	7 per cent.
When due.....	1861.
Interest payable.....	1st Jan. and July.
2d mortgage.....	\$198,000.
Interest.....	7 per cent.
When due.....	1860.
Interest payable.....	1st Oct. and 1st April.
3d mortgage.....	\$262,500.
Interest.....	7 per cent.
When due.....	1875.
Interest payable.....	15th May and 15th Nov.
Floating debt.....	\$144,229 81.

RUNNING EQUIPMENTS.

Number of Locomotives.....	6.
Passenger cars, 1st class.....	
Baggage ".....	4.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends Sept. 30:

RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$76,249 87	70,616 90	72,734 57
Freight.....	70,985 53	80,334 00	83,563 85
Mails.....	3,200 00	3,200 00	3,200 00
Express.....	1,880 00	2,160 00	2,160 00
Cost of operation.....	\$66,407 20	67,007 40	70,910 35

DETAILS OF CONSTRUCTION.

Length of road.....32½ miles laid.  
 Termini.....North Bennington and Troy, at present.  
 Gauge.....4 feet 8½ inches.  
 Single track.....32½ miles.  
 Sidings.....3,23 "  
 Length of rail bars.....18 feet.  
 Weight per yard.....65 lbs.  
 Kind of iron.....English.  
 When laid.....1852.  
 Kind of rail.....T.  
 Ties.....Chesnut and Tamarack.  
 Length.....7½ feet.  
 Size.....6 by 6 inches and over.  
 Ballast used.....Gravel.  
 Fuel.....Hard wood.  
 Amount per annum.....4,240½ cords.  
 Telegraph on road.

No. LXV.

WORCESTER &amp; NASHUA R. R.

OFFICERS.

President—GEORGE T. RICE, Worcester.  
 Treasurer—T. W. HAMMOND, "  
 Cashier—HENRY M. WITTER, "  
 Superintendent—G. W. BENTLEY, "

DIRECTORS.

GEO. T. RICE, Worcester.  
 STEPHEN SALISBURY.  
 ALEX. DEWITT, Oxford.  
 JACOB FISHER, Lancaster.  
 THOS. CHASE, Nashua.  
 JNO. H. WILKINS, Boston.  
 A. E. HILDRETH, Groton.  
 FRANCIS H. DEWEY, Worcester.  
 F. H. KINNICTT, "



The ANNUAL MEETING of the stockholders is held early in January.

#### RUNNING EQUIPMENTS.

Number of Locomotives. 10.  
 Passenger cars, 1st class 8.  
 " " 2d " 4.  
 Baggage " " 4.

#### DETAILS OF CONSTRUCTION.

Length of road.....45.69 miles.  
 Termini.....Worcester and Nashua.  
 Gauge.....4 feet 8½ inches.  
 Single track.....44.93 miles.  
 Double track......76 "  
 Sidings.....767 "  
 Length of rail.....21 feet.  
 Weight per yard, rail.....56½ and 57 lbs.  
 Kind of iron.....American and English.  
 When laid.....Finished in 1848.  
 Kind of rail.....Erie pattern.  
 Ties.....Chesnut.  
 Length.....7½ feet.  
 Size.....6 by 7 inches.  
 How often changed.....From 5 to 7 years.  
 Ballast used.....Gravel.  
 Fuel.....Chiefly hard Pine, Oak,  
   Chesnut and Hemlock.  
 Amount per annum.....28,000 cords.

## Railroads.

### GRAND RAPIDS AND INDIANA RAILROAD.

Under the above caption the *Detroit Tribune* gives an able article on the prospects and resources of the above road. It also pays a well merited compliment to the present officers of the Company, whose energy, skill and perseverance have been chiefly instrumental in placing the Road in its present flattering circumstances. It says: "Among the many railroad enterprises which have received substantial aid from the munificent land grants of Congress, the Grand Rapids and Indiana Railroad stands first in importance, as regards the length of its line, the value of the land granted to aid in its construction, and its influence upon the prosperity of the State.

The southern terminus of this road is at Fort Wayne, Indiana. From Fort Wayne to the south line of this State, near Sturgis, this road passes through or near the villages of Summerville, Avilla, Kendallville, Romeo, Northport, Wolcottville, La Grange and Lima, a distance of 48 miles, through a country unsurpassed in the fertility of its soil and already in a high state of improvement and capable of furnishing a large amount of business for this road.

From the State line to Grand Rapids, 87 miles, the road will pass the villages of Sturgis, Mendon, Brady, Kalamazoo, Otsego and Hopkins, all of which are important points of trade which will be largely increased by the facilities which this road will create.

At Fort Wayne this road will connect with the whole system of Ohio and Indiana Railroads leading east to the Atlantic, west to the Mississippi at this time, and ultimately to the Pacific, and south to the Ohio River, and soon to be extended to the Gulf of Mexico.

Twelve miles north of Fort Wayne, this road will cross the Northern Indiana Railroad, to be completed within two years—25 miles from the same point, the Northern Indiana Air Line Road, 50 miles north the Michigan Southern, 90 miles north the Michigan Central, and 135 miles north the Detroit and Milwaukee Road at Grand Rapids, where it will connect with Lake Michigan by steamboat navigation. And where also, it will take up the immense and rich products of the valley of Grand River; plaster, stone and lumber, and distribute them over the southern portions of this State, and

the northern portions of Indiana and Illinois, by means of its connections and crossings above named—a business which would now warrant the construction of a Railroad without the aid of Land Grants, to say nothing of the passenger travel which, during a greater portion of the year, now amounts to one hundred persons per day by stage, and which would be doubled by the mere construction of the Road.

One hundred and seventy-five miles north of Fort Wayne this road will cross the Muskegon River at the important village of Newago, where it again communicates with Lake Michigan by steamboat navigation. Proceeding north, this road will touch Grand Traverse Bay, one of the finest harbors in the world, and 255 miles from Fort Wayne; and still further, Little Traverse Bay, another good harbor on Lake Michigan, 310 miles from Fort Wayne; and thence to Mackinaw, 350 miles from Fort Wayne, where, during the summer, but a short ferry is required to reach the Upper Peninsula, and during winter a substantial ice bridge will always be found, and where an open navigation or the bridge can be relied upon with the exception of a few days each year.

Capitalists cannot fail to see the importance of this road, and that of itself it would prove a safe and profitable investment, but added to all the inducements so briefly alluded to, is the fact that this Company has a grant of its road worth at least five millions of dollars, when the road is completed.

Its management is in the hands of able and prudent men, whose energy has been well tested during the past two years, and who will not stop until the road is completed, and the Rip Van Winkles of Mackinaw are aroused by the snorting of the Iron Horse.

### N. E. & S. W. ALABAMA R. R.

The annual meeting of the stockholders of this company was held at Eutaw, Alabama, Jan. 15, 1857. The following gentlemen were re-elected Directors for the ensuing year: James Harrison, R. F. Houston, of Sumter; Jas. Jack, Dr. F. Merriwether, Jas. J. Thornton, Sol. McAlpine, Samuel L. Creswell, of Greene; Alfred Battle, J. H. Dearing, A. B. Dearing, R. H. Clements, of Tuscaloosa, and Wm. S. Mudd, of Jefferson.

At a subsequent meeting of the Directors, L. H. Garland was elected President, H. A. Snow, Treasurer, and W. S. Foster, Secretary.

The report of the Directors is too long for insertion in our paper entire, but we make such extracts as will show the position and prospects of the company. During the year that has elapsed since the last report, this company has consolidated with the Will's Valley Railroad Company, and hereafter the two companies will be practically one. The Directors report that they have favorably considered the practicability of the manufacture of the iron rails upon the line of the road, and that they have authorized the expenditure of a sufficient sum of money to obtain a thorough exploration of the coal and iron beds on the line.

The report of the engineer gives the following information of the route and resources of the road:

"If any one will look upon a railroad map of the United States, he will observe a system of roads nearly completed, beginning at Boston, and passing thence through New York, Philadelphia, Baltimore, Washington, Charlottesville, Lynchburg, Abbingdon and Knoxville to Chattanooga, and traversing the States of Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Virginia and Tennessee. This system approximates as nearly to an air-line as the topography of the country will admit; and what you propose to do is to take up this system at the city of Chattanooga, and to carry it on in the same general direction, through or near Gadsden, Ashville, Springville, Elyton, Tuscaloosa, Eutaw and Livingston, to a point on the Mobile & Ohio Railroad, in the vicinity of Meridian, about 125 miles from the city of Mobile, thereby forming the shortest connection between the cities of the Gulf. You have a distinct charter in Mississippi, and thence to Will's creek, 90 miles beyond Elyton; thence to Chattanooga you have control of the Will's Valley Railroad. As if to facilitate such an enterprise, nature has furnished a succession of beautiful valleys, lying in the proper direction, and separated by low ridges cleft nearly to their base, and by no means difficult to be surmounted. Your portion of this system is 295 miles in length, and it is but 21 or 22 miles (or one hour's run) longer than an air-line between its termini; but 31½ miles are curved, and of these the shortest flexure has a radius of 1,910 feet. At an average cost of \$6,620 per mile, gradients have been obtained, none of which exceed 27 feet per mile against the trade ascending south, and 47 feet per mile against that ascending north.

"Considered merely as a link in the series of roads above alluded to, yours is one of incalculable importance. When completed it must command every pound of freight and every passenger arriving at Chattanooga, and destined to the principal ports on the Gulf and Texas, via Vicksburg, Shreveport, &c.; and when to the immense stream of trade and travel which must flow upon and over your road from the northeastern roads referred to, we add the consideration that it passes through one of the finest mineral regions in the world, abounding in coal, iron, marble and lime, there can be no doubt of its controlling a business that will speedily require the construction of a double track.

Estimated cost from the Mobile & Ohio Railroad to the city of Chattanooga, 295 miles.

Graduation.....	\$1,948,000
Bridging and masonry.....	304,000
Cross-ties.....	300,000
General management.....	180,000

Total liabilities.....\$2,732,000

"To effect a connection with the city of Chattanooga, it will not be necessary to build at present farther than to a junction with the



Nashville & Chattanooga Road, at a point several miles this side of Chattanooga; inasmuch as terms have already been ratified by the two companies, in virtue of which you have the right to run your trains over their track to your own depot in Chattanooga.—This diminishes your present liabilities about \$112,000; leaving their total amount for the whole road, \$2,620,000.

#### RESOURCES.

Renewed and new subscriptions in cash on 1st division.....	\$574,950
Subscriptions in labor for stock.....	442,600
Original subscriptions.....	75,000
Subscriptions on 2d and 3d divisions.....	400,000
Subscriptions in stock induced by the payment of half cash for labor: increase of stock from the nature of the contracts.....	500,000
Total resources.....	\$1,992,550
Your liabilities were computed at.....	\$2,620,000
Resources.....	1,992,550
Deficit.....	\$627,550

"This deficit is in grading and cross-ties, and may be met by a cash subscription of half its amount, say \$315,000; and this is all that you now require to prepare your whole road for its clothing and equipage from the Mobile & Ohio Railroad to the Nashville & Chattanooga Railroad. This deficit amounts to less than one-eighth of the whole liability. You have seen from a foregoing statement that the majority of roads now in successful operation have been brought to a completion with a subscription of only two-thirds of the cost of preparation for the rails. Your resources are now more than seven-eighths of that cost, and you therefore present, as you are, a better condition than most roads have done. But nothing should relax your efforts to present an entire road bed completed and free from debt. This will, with your position, raise your credit to the highest rank, and enable you to finish your work without embarrassment or delay. You must therefore provide this sum of three hundred and fifteen thousand dollars.

"There are still other valuable resources to which I have not yet referred—those derived from the grants of public lands. These grants give to the railroad companies the alternate sections of land for six miles in width on each side of their respective central lines, amounting to six sections, or 3,840 acres per mile; and, in case that quantity cannot be found within six miles, the companies may appropriate any of the vacant lands within fifteen miles on either side, until their compliments are made up. The first grant made by Congress to this road is from the Alabama and Georgia State line to Elyton, the distance of 94 miles, which, if the land can be found within fifteen miles on each side, amounts to 370,000 acres, but which we will assume at 300,000 acres.

"The next grant is made to such road southwest of Elyton, and extending from that place to the Mississippi and Alabama line, as may be designated by the Alabama Legislature;

and as yours is the only road having such characteristics, the grant cannot be considered doubtful, although its confirmation awaits the action of the Legislature. On that portion of the road lying below the city of Tuscaloosa, there are scarcely any vacant lands within fifteen miles of the line, so that this portion of the grant we shall consider of no value. On the remaining portion—that between Elyton and Tuscaloosa—we will assume that two-thirds of the full compliment of vacant lands may be found or 2,500 per mile. This for the distance of 54 miles will make 135,000 acres.

"I have no means of forming a correct estimate of the value of these lands. Shut out as they have been from the markets of the country, they have not been entered for agricultural purposes, and a large proportion of them are worthless for any such purpose; but the most of them abound in iron and coal, and are covered with an immense forest of the long leaf pine, capable of furnishing the best lumber, as well, also, as tar, pitch and turpentine. These are precisely the kind of lands that appreciate most in value by the construction of railroads; and in this view it may not be unreasonable to assign to them the government price of one dollar and a quarter per acre.

"This estimate makes the proceeds of the first grant, about which there is no dispute or contingency, \$375,000; and of the second grant, contingent on the action of the Legislature, \$198,750.

"If the proceeds of the first grant were immediately available, there would be no deficiency in your resources for meeting your entire liabilities; but the value assumed for the lands has yet to be created by the completion of the road. Your resources from this quarter should, therefore, be reserved either for the encouragement of the manufacture of iron upon the line of the road, or for the purpose of facilitating the sale of your bonds, in case you decide, in preference, to purchase it.

#### LETTING OF THE FIRST DIVISION.

"After having obtained the means of progressing with the work on the first division, I was instructed by the Directory to let out the grading, bridging, masonry and cross-ties at such periods as would ensure an early and simultaneous preparation of the track. I accordingly advertised the letting of the heaviest grading, and have succeeded in putting all such on the 1st division under contract.—There are yet about five average and a few light sections to let; but the average sections lie at the upper end of the division. It has been decided to use trestle-work, for the most part, through the river swamps; and the letting of this work, together with the bridging, cross-ties and light grading, has been purposely deferred, inasmuch as it may be commenced many months later and still finished

simultaneously with the heaviest work. The means for putting all this work to contract are provided. The amount of grading on the first division which is actually under contract, for stock and cash together, is about \$600,000, or about one-third of the grading of the entire road.

#### IMPORTANT DECISION OF THE SUPREME COURT.

**CATTLE MUST BE KEPT OFF THE RAILROAD TRACK.**—The following account of a case recently decided in the Supreme Court, is from the proof-sheets of the forthcoming seventeenth volume of Illinois Reports:

The Illinois Central Railroad Company, Plaintiff in Error, vs. Henry Reedy, Defendant in Error.

#### ERROR TO LA SALLE COUNTY COURT.

Trespass *vi et armis* is not the proper form of action for injuries resulting from the negligence of the servants of a corporation; trespass on the case is the proper action, of which a justice of the peace has not jurisdiction.

Animals wandering upon the track of an unenclosed railroad are strictly trespassers, and the company is not liable for their destruction unless its servants are guilty of willful negligence, evincing reckless misconduct.

The burden of proof is on the plaintiff, to show negligence. The mere fact that an animal was killed will not render the company liable.

In order to show the manner in which railroad trains are conducted, witnesses acquainted with their management must be examined.

This was an act of trespass begun before a justice of the peace, for killing a steer, by the train of the defendant, running upon the railroad in LaSalle county. Judgment was rendered for the plaintiff below for twenty-five dollars and costs. The case was taken by appeal to the LaSalle County Court. The case was submitted to H. G. Cotton, Judge of the County Court, without the intervention of a jury, who gave judgment for Reedy for thirty dollars and costs. The railroad company thereupon brought the case in the Supreme Court.

There was but one witness examined, who testified that he was ploughing on the 5th of May, 1855, when he heard a freight train coming on the Illinois Central Railroad; stopped to look at it, and saw a lot of cattle on the track, all of which left the track except one steer, who ran before the train about twelve paces, when the locomotive caught him and shoved him along the track, and then upon one side; both of his hinder legs were broken, and his fore legs severely wounded; the steer died of his wounds; that the value of the steer was thirty dollars.

The counsel for defendant maintained that the proper form of action was not trespass *vi et armis*, but trespass on the case for the negligence of the servants of the company. This was not the case in this cause. No negligence had been complained of on the part of the company or its attachees. If those put in charge of the train, in conducting it, behaved carelessly, and thereby caused the injury, such carelessness is the direct and immediate cause of the injury, for which they might be made liable in trespass; but the employer, whose act was at the most but the remote cause of the injury, could only be made liable in an action on the case.

But, waiving this question as to the form of the action, the evidence does not show such a case of negligence in those having the charge of the train, so as to render the company liable for the injury sustained. The rule laid down by this Court in the case of *The Chicago & Mississippi Railroad Co. vs. Patchin*, 16 Ill. 198, must control this case. It had



been previously settled that the company was not bound to fence the road against, or to prevent the intrusion of stock upon it. In this case it was settled that animals wandering upon the track of an unenclosed railroad were strictly trespassers, and that the company was not liable for their loss while on the track, unless its employees were guilty of wilful or wanton injury, or of gross negligence, evincing reckless or willful misconduct.

The only point which the evidence settles is the killing of the steer. There is nothing testified to show the least want of care, or that by the greatest possible exertions the accident could have been prevented; much less is there that gross and culpable negligence, or wanton recklessness shown, which the law requires in order to render the company liable for the loss of the steer. The burden of proof is on the plaintiff, and it is for him to show by facts and circumstances, and by those acquainted with the management of trains, who could speak understandingly on the subject, that it was practicable and easy to have avoided the collision, and that in not doing so those in charge of the train were guilty of that measure of carelessness, or wilful misconduct, which the law requires to establish the liability of the defendant. Defendant's train was rightfully on the track, and could go nowhere else. The plaintiff's steer was there wrongfully; he was wrongfully allowed to be in the most dangerous place which could be found, and where there was every reason to suppose he would be killed. His being there was not only dangerous to the steer, but to the property of the company and the lives of those upon the train, and courts and juries should not strain the law to encourage the owners of stock to allow it to run into danger, which exposes not only their own property, but the lives and property of others.

The judgment must be reversed, and the cause remanded. *Judgment reversed.*

#### RECENT IMPROVEMENTS IN THE PERMANENT WAY OF RAILWAYS.

By Mr. P. M. Parsons, Assoc. Inst., C. E.

The improvements described in this paper had reference particularly to the form of the chair and to the nature of the fastenings. As laid on the East Kent Railway, the joint chairs weighed about 54 lbs. each, and, with the exception of being somewhat longer, were in general appearance similar to ordinary chairs. They were 12 inches in length, and the sole, or bottom, was provided at the under-side with a cross rib at each end, overhanging the sleeper on each side, and forming with it an inverted trougher girder, of which the ribs were the webs, and the sole or bottom of the chair was the flange. One jaw of the chair was made to fit the shoulders of the rails, and the other was provided with two recesses, which received two thin creosoted elm blocks, cut across the grain, acting as cushions—a wrought iron wedge, provided with jags, or barbs, being driven between the rails and the wooden cushions. In the intermediate chairs, one jaw was of such a form that the upper part pressed against the web, and the lower part against the side of the table. The other jaw had an inward inclination of about one in three, and was provided with a dovetail recess, to hold the wooden cushion—a cast iron wedge being introduced between it and the rail. This wedge, instead of fitting against both shoulders of the rail,

was made to bear against the web, and the upper part of its lower shoulder, by which the rail was forced down upon the seat, and was held firmly in a lateral direction. A short length of way on this system was laid in 1854, on the Great Northern Railway, under the direction of the Engineer-in-chief, Mr. Cubitt, and the results were considered to be very satisfactory.

Specimens of these chairs and fastenings were exhibited, and the subject was generally fully illustrated by a large series of models furnished by the Permanent Way Company. —*London Mechanics' Magazine.*

#### WESTCHESTER R. R. CO. vs. EBNER HICKMAN—IMPORTANT DECISION.

The company brought suit in the Chester county Court of Common Pleas, to recover the amount of defendant's subscription to the capital stock.

To the terms of subscription to the stock of the company there was the following proviso:

"Provided, nevertheless, that the subscription hereto shall be binding only in the event of an aggregate of \$300,000 being subscribed, inclusive of all former subscriptions, and of such subscriptions as shall be made absolute, or become so by the fulfilment of these conditions."

Mr. Hickman, the defendant, refused payment, upon the ground that the whole amount above specified had not been subscribed, and that \$5 per share had not been paid at the time of subscribing, and that therefore *his subscription was not binding.*

The plaintiff attempted to prove that the whole amount (6,000 shares at \$50) was subscribed as follows:

5675 shares by testimony satisfactory to the Court.

518 shares proved by Dr. J. P. Jefferis.

149 shares issued to landholders for damages.

779 shares proved by the Treasurer—of these 445 were given in payment of contractors, labor, &c.

Of the above shares it was admitted that 391 were subscribed on special conditions different from the proviso, but which conditions had been fulfilled, and that 467 shares were subscribed after the first call for installments, in January, 1852.

Judge Haines, on the trial, instructed the jury that

"Before the plaintiff could recover he must prove that at least 6,000 shares had been BONA FIDE subscribed; that the plaintiff had exhibited subscriptions to a larger amount than the number required, but many of them were of a character that excluded them from being taken into the account, and accordingly they were directed not to consider as part of the 6,000 shares the following, viz: All those subscribed on special conditions differing from the plaintiff's contract, 391 shares; those given for land damages, 149 shares; those issued for work and materials on and for the road, 445 shares; all those subscribed after the first installment called in, 467 shares; those released by the managers, 28 shares; and those proved by John P. Jefferis, 518 shares; making an aggregate of 2,105 shares, which, being deducted from the whole number proved, left less than the required number."

Under these instructions, the jury found a verdict for defendant.

The case was taken up to the Supreme

Court by the company. After argument, the following points were decided:

1st. That the payment of \$5 on each share subscribed AFTER THE INCORPORATION AND ORGANIZATION OF THE COMPANY is unnecessary, and the non-payment does not affect the validity of the contract.

2d. That all the shares rejected by the Court, in enumerating the 6,000, ought to have been received and counted, including those proved by Dr. Jefferis; these making more than the requisite number of 6,000 shares subscribed before the final call of January, 1855.

The judgment of the Chester county Court was therefore reversed, and another trial ordered.

Want of room restricts us to a mere synopsis of the above case, which was selected to test the validity of a number of similar subscriptions. The points decided will affect many railroad companies; and the law of subscriptions, as laid down, is of great importance.

The case was ably argued. Bell and Waddell for plaintiff; Lewis and Everhart for defendant. —*West Chester Record, Feb. 28.*

#### NEW PROJECTS, REVIVALS, &c.

RUSSIA.—The Brussels organ of the Russian Government, *Le Nord*, contains the details of the concession granted for the great network of railways to be constructed within ten years, at an outlay of about 45,000,000 sterling. The contracting parties are: Messrs. Stieglitz, of St. Petersburg; S. A. Fraenkel, of Warsaw; Baring Brothers, of London; Hottinguer, of Paris; Hope & Co., of Amsterdam (represented by Thomas Baring); Isaac Pereire, of Paris; Mendelsohn, of Berlin (represented by Auguste Thurneysen); and Emil Pereire, Fould Oppenheim, Mallet Brothers, Baron Seilliere, J. J. de Uribarren, Desarts-Mosard & Co., Adolphe D'Eichthal, Frederic Grininger and Casimir Salvador, all of Paris. Subjoined are the leading conditions:

"Capital—275,000,000 roubles (about £45,000,000 sterling).

"The founders of the line have subscribed the first series of shares, amounting to 75,000,000 roubles (£12,500,000).

"The company are to complete 200 miles by the end of the third year, 665 miles by the end of the fifth year, and the whole by the end of ten years from the date of the ukase.

"The line is to be made for two lines of rail, but the company are allowed to commence operations with one line only laid down.

"Five per cent. of the nominal capital of the first series to be paid to the government as caution money (£625,000), and 5 per cent. on all sums called up on the remaining portions of the capital, within one month of the calls being paid; but this is to be repaid in part as the works are completed. £480,000 is to remain in the hands of the government until the line is opened throughout.

"The lines are divided into the following sections: 1. St. Petersburg to Vilna or Kovno. 2. Vilna or Kovno to Warsaw. 3. Moscow to Kursk. 4. Kursk to Theodosia. 5. Kursk or Orel to Dunabourg. 6. Dunabourg to Libau. 7. Moscow to Nijnel Novgorod.

"As each of these sections is finished the guarantee of 5 per cent. comes into operation upon it, irrespective of the remaining sections.



"The capital of the line from St. Petersburg to Warsaw is to be taken at £13,600,000.

"That of the branch to Königsberg 69,000 roubles per verst (or about £16,400 per mile); and on the other lines at 62,500 roubles per verst (or about £14,850 per mile).

"On the sums advanced by the State to make up the guaranteed profit of 5 per cent., 4 per cent. shall be charged as interest, and these sums and the interest upon them shall be repaid to the State out of the surplus profits beyond 5 per cent.

"When the net profit of the Warsaw line shall exceed 5 per cent. on the capital estimated for it, one-half of the surplus shall be paid to the State until that payment shall amount to £2,880,000, the sum it has paid for works on the line.

"The government may purchase the whole of the lines after thirty years from the date of the concession, on payment of an annuity, which shall in no case be less than the amount of the guaranteed interest (five per cent.)

"In buying back the lines, the company is to be repaid for any extra stock, &c., it may have found necessary to add after the original stocking of the lines.

"The government undertakes to grant no competing lines for twenty years, and if it does after that time the company to have the pre-emption of the concession.

"Soldiers to pay one-fourth of the ordinary tariff; horses, baggage and military stores one-half of the ordinary rates.

"All materials to be admitted duty free during constructions, and no stamp duties or other dues to be levied on the transactions for purchase of land, &c.

"The Moscow to carry everything during construction at cost price."

The great facts for notice are that the £45,000,000 sterling must be supplied by the contractors, at all costs, within ten years from the date of the concession, thus insuring a constant flood of Russian securities, to depreciate the original issues, and that no certainty can be given as to the adequacy of the amount allowed per mile.

[From Herapath's Railway Journal.]  
**ADDING TO CAPITAL.**

It being now nearly the high season of the railway meetings, a few words may not be unacceptable on the practice of adding to capital accounts. We have ourselves uniformly advocated the closing of capital as the only true commercial principle to make railways a valuable property. It is the way in which mercantile and commercial concerns are carried on, and large fortunes realized from them. In fact, people cannot generally obtain money for an extension of their trade otherwise than by taking it out of their income. Loans by private individuals, or private partnerships, are not so facile to be obtained as by public companies, and, therefore, individuals are obliged to rely on their own means.

In a public company, the case as to credit and the facility of raising money are different. The property of the company is usually so large, and the individual risk of lending considered so small in comparison to the company's property, as to do away with fear and objections. Over and above the means as private concerns of raising money from their own resources, public companies have opened to them the credit of other parties.

These two methods should be considered on their separate bases. The true mercantile principle is, as we have often enunciated, that after lines shall have been made and opened for traffic time enough to see what the traffic requires of them—that is, perhaps, in two or three years—their capitals should be absolutely closed, and all further requirements henceforward provided out of revenue. The dividends for a time would slightly suffer, but the capital of the company would become year by year more valuable, and handsomely repay the proprietors by the growing value of their property; and the shareholders would thereby be enriched in the same manner as if they drove a thriving private trade. In fact they would, to all "intents and purposes," as lawyers say, tread the same road to fortune as private prosperous traders.

This, however, could only be done up to a 10 per cent. dividend. Our own wise legislators, under the guidance of Lord Seymour, some years ago, passed an act enabling government, as soon as for three successive years the dividends of any line averaged 10 per cent., to take the line, on paying twenty-five years' purchase of the dividend for it. That is, the government, under this act, has the power to wrest a line paying 10 per cent. on its capital from its rightful owners, by giving £250 for every original £100 of its cost.

We cannot here stop to enumerate all the practical evils to the country of this unwise act; but a more foolish or mischievous measure to the nation, and a more unjust one to individuals, was hardly ever concocted. Lord Seymour, when he framed the act, must have been exceedingly ignorant of business, or, as a patriot, monstrously short-sighted, and the Legislature which passed it demented.

Under the above plan, of finally closing the capital, the dividends and market value of the property would gradually grow together. The other plan—that of perpetually augmenting the capital for every little necessary—works in the opposite direction. The dividends and market value of the shares either decrease or remain at about stationary amounts. Their motion is hardly ever direct; they are seldom stationary, but generally, as our English railways have lamentably proved, retrograde.

Admitting, however, for a moment, that people would be satisfied with a stationary dividend, for we cannot believe that any one would relish a diminishing one, let us inquire under what circumstances additions to capital might be tolerated.

It is evident that the chief, if not the only allowable case, is to furnish accommodation for additional traffic, and that to an extent that the profit of it should not be less on the outlay than the dividend the line is paying. Thus, if the dividend of the line was 5 per cent., and £100,000 was required for working stock, sidings, buildings, or alterations, &c., the profit on the additional traffic should not be less than £5,000 a year; and if the dividend was 6 per cent. the profit on the £100,000 should be at least £6,000. Extra capital so laid out could not fairly be objected to, on the assumption that the existing dividend should not be lessened.

On this principle the capital should never be increased, except for acts of necessity for the reception and accommodation of more and equally paying traffic. Had our railway companies not absolutely closed their capital, but adhered to this principle, they would now return much better dividends than they do; all the great lines, for instance, would have continued to pay their 8 or 10 per cent.

The present practice of adding to capital the cost of every petty thing that is new, without regard to its effect on income, is obviously erroneous. The advocates of this plan satisfy their consciences of having done justice to the company if they repair old or renew worn out things out of revenue, and that all beyond are legitimate additions to capital, without any regard to their influence on revenue. Nothing can be more fallacious and unsound. In private concerns it is true that parties occasionally do expend money for the better accommodation of their business, for their own comfort and convenience, and other matters; but it is done out of revenue, or out of their existing capital. Money is not raised and interest paid for it unless there is something to be got by it. So it should be in railways. If it is determined to keep an open capital, the only true and safe way is to make such additions, and such additions only, to it, as shall be required by an adequate increase of traffic. Sticking up to capital the expense of every whim which comes across a Director or official's mind, is eminently wrong. If an open capital is kept, no addition on true commercial principles can be made to it, unless it be to produce a net per cent. traffic at least equal to the dividend per cent. that is paid. If otherwise, the consequence must be a diminution of dividend.

#### ANTIMONY, BISMUTH AND COBALT.

In a lecture recently delivered before the Royal School of Mines, England, on the properties of these metals, the lecturer, Dr. Percy, remarked as follows:—

When copper was mixed with antimony in excess it formed a regulus of beautiful violet color, which by the old alchemists was denominated regulus of Venus. It frequently occurred with sulphur, and the general percentage of the ores was 72.8. From Boerno they had recently received some large supplies; and it is said that from this source Rajah Brooke had made a great deal of money. A simple method of melting antimony was taking a large crucible, say one of 20 lbs., placing this in a position where it could be kept comparatively cool, and inserting in it another crucible, which had to be surrounded by charcoal and heated, the lower one to be well luted to the upper; this to have a cover on the top; an aperture being made in the upper; as soon as fused the melted antimony would drop in the lower, and by this process it could be saved. It was not necessary for him to enter into many details. When melted it was called martial antimony; when cast into moulds, on the surface it presented a star-like appearance, and the smelter had a particular pride in presenting this sort of surface. A Cake of antimony was then shown with the form described. Antimony entered largely into the composition of type metal; what was considered a good mixture for this was three parts lead and one antimony, sometimes a small quantity of tin was added. If type metal was made too ductile, the letters would get out of shape and become distorted, and if too sharp they were apt to spoil the paper; he did not believe there was any specific standard for type metal, as in many cases, the several founders had each a formula of their own. When antimony was alloyed with copper it was found brittle; the specific gravity of this alloy was greater than the mean of the two metals. It had been proved that antimony had been used in the composition of bells, and a work was published in Madrid,



in 1567, which stated that several bells in Spain contained that metal. The Great Tom of Lincoln, and the bell of York Minster, contained antimony. According to assay, the Great Tom of Lincoln contained—copper, 74.70; tin, 20.61; antimony, 3.72; nickel, 0.58; iron, 0.09. These two last metals were probably introduced accidentally, in combination with others, while, at the same time, they had discovered traces of lead and zinc. The Chinese had likewise used antimony for the purpose of making mirrors. This composition consisted of—copper, 80.83; lead, 9.71; antimony, 8.43; and of iron a mere trace.

A patent metal had been invented by Mr. Wetterstedt, for the purpose of sheathing ships; he had not heard much of this, and therefore, presumed its application had not been so successful as had been anticipated. This metal was composed of—antimony, 43; lead, 4.4; mercury, 1.3. The several ores of the mineral were then described, as well as the mode of assaying, which the lecturer described as being very simple, and best to be done on a large scale, so as to afford a fair average assay.

Bismuth has been known for the last 300 years. At first it was mistaken for lead, and as such often used in cupellation. Its ore occurs with several other metals, more especially cobalt. Commercial bismuth was never pure, and sometimes it contained as much as 60 ozs. of silver to the ton, and gold which would be worth extraction, and this he wished to be publicly known. According to Scherer, the specific gravity of the crude metal was 9.783, while that of the pure metal was 9.779. Its melting point was 264°; it did not sensibly oxidise when exposed to moisture. It was occasionally produced in nickel refining. The metal was obtained easily; the most simple way was by lixiviation. A description was then given of the old method of obtaining bismuth, as well as the furnaces introduced by Plattner, at Schneeberg, and Johan Georgenstadt, in Saxony. Berthier had stated that an alloy of 66 parts of lead and 34 parts of Bismuth, was more tenacious than lead, possessing a color between tin-white and lead gray. This could be beaten out into thin foil, and was fusible at 166°. Bismuth could be mixed with mercury without the latter losing its fluidity. Lead and bismuth were often used for the purpose of adulterating mercury, and bismuth was likewise employed for the purpose of silvering glass; this process was then described. With regard to cobalt and nickel he could enter largely into details, but having had access to the manufactories in Birmingham, where the most unreserved confidence had been shown him, he was, consequently, bound in honor not to divulge all he knew; however, he would tell them as much as he consistently could.

Cobalt had been used as a coloring matter in ancient times, but the blue glass and the enamels in the Museum which he had examined had received their colors from copper not cobalt. In Saxony and Norway, where there are large establishments for the reduction of cobalt, and the operations there were carried on with great secrecy, about sixteen years ago his late friend, Mr. Askin, of the firm of Evans and Askin, had introduced the manufacture of cobalt there, and this had completely revolutionised the trade. What had been sold some years since for 21.2s. per lb. now only realized 18s. The mode of separating cobalt from nickel could be found in Gmelin's *Hand-*

*book of Chemistry*, and other works. The oxide of cobalt had been found in Missouri, accompanied with oxide of manganese. The introduction of artificial ultramarine had greatly lessened the price, it now being used in several instances in lieu of cobalt. The ores of cobalt were then described, as well as the various coloring matters and combinations obtained from them, which were illustrated by specimens of the metal in its various stages.

#### THE COFFEE TRADE AND CULTURE.

Like sugar, coffee was first introduced as a luxury and finally became one of the established necessities, or at least staple articles of consumption, throughout the civilized world. It has also followed, both in production and consumption, the same geographical lines, and appears to have been affected by the same industrial laws and political and social changes as sugar. As the demand for sugar has constantly increased and is still increasing, so has the use of coffee extended, and it is likely that its progress will be *pari passu* with sugar, even if it does not exceed the latter, on account of the happy combination it affords as a stimulant, a sedative and a nutrient in the same beverage.

It is curious to trace the effects produced by the forcible abolition of slavery in St. Domingo in 1792, and the voluntary emancipation of the slaves of Jamaica in 1834, upon the geography of the coffee culture and upon the amount of the production in the islands mentioned. For instance, before the breaking out of the revolution in 1792, the principal supply of coffee for Europe was derived from St. Domingo, that island having produced no less than 75,000,000 pounds in 1789; but after the servile insurrection and the liberation of the slaves, the supply was almost entirely interrupted, and, though the cultivation of coffee partially revived afterwards, in 1818, the exports were only 26,000,000 pounds, and at this time they do not exceed, it is supposed, 30,000,000 pounds. The sudden check given to the culture in St. Domingo largely stimulated it in Cuba, Jamaica, and some of the East India Islands. Finally Brazil, on account of its abundant and cheap slave labor, became a formidable competitor, and after the emancipation by the British Government of the slaves in Jamaica, it began to supply not only the deficiency caused by that act, but to furnish an equivalent also for the growth of coffee in Cuba, which had been nearly altogether superseded by sugar.

As an evidence of the wonderful stimulation given to coffee culture in Brazil by the political causes we have alluded to, combined with the enormous price—nearly as high as 40 cts. per lb., at one time—reached by coffee, and the unrestricted introduction of slave labor, we find that, in 1808, in the infancy of the culture, the production did not exceed 8,000,000 pounds; in 1830 it increased to 64,000,000; in 1840 to 168,000,000; and in 1854 to 400,000,000, or two-thirds of the entire production of the world.

The consumption of coffee has steadily kept pace with its production, if it has not taxed the productive resources of all the coffee-growing countries; but the greatest increase of consumption has been in the United States, where for twenty-five years it has averaged 7½ per cent. per annum, while for the world the average was 4 per cent. per annum. The following figures show the condition of the coffee trade between the United States and Brazil, as now ascertained:

For the fiscal year ending the 30th June, 1855, the United States imported from Brazil 135,369,333 lbs. of coffee, of the value of \$11,315,838; other Brazilian products, including some sugars, amounted to \$9,203,117.	
Total imports.....	\$15,218,835
Total exports for Brazil.....	4,261,273

Balance of trade against the United States... \$10,957,662  
The imports of coffee alone from Brazil in 1854-55 exceeded the exports of the United States to that country by \$7,553,515.

The total importation of coffee into the United States for the year ending June 30th, 1855, amounted to 190,764,359 lbs., valued at \$16,764,359. For the year ending June, 1856, the quantity has been much larger, and as prices have ruled high, the value has been much greater.

We also subjoin the following table, showing the relation in which Brazil stands to other coffee-growing countries:

Comparative Statement of the production of Coffee in the world at different periods—(the production of one year enters into the consumption of the succeeding year.)

	1848.	1850.	1854.	1855.
Brazil, lbs.	270,000,000	280,000,000	400,000,000	320,000,000
Java.....	110,000,000	115,000,000	140,000,000	128,000,000
St. Dom'go.	40,000,000	45,000,000	40,000,000	35,000,000
Cuba & P.R.	40,000,000	30,000,000	25,000,000	20,000,000
Br. W. I.	10,000,000	5,000,000	5,000,000	5,000,000
Sumatra.....	10,000,000	15,000,000	15,000,000	15,600,000
Mocha, etc.	5,000,000	5,000,000	5,000,000	5,000,000
Ceylon, in 25,000,000	35,000,000	40,000,000	50,000,000	50,000,000
Venezuela	20,000,000	25,000,000	25,000,000	20,000,000
Costa Rica	5,000,000	7,000,000	8,000,000	9,000,000
Total.....	540,000,000	565,000,000	703,000,000	667,000,000

Now it is evident from all the foregoing, that the position of Brazil in regard to coffee is very analogous to that of the United States in regard to cotton. It is also seen in the above table that the island of Ceylon, one of the British East India possessions, alone approaches Brazil in the increase of its coffee production, and thereby hangs the solution of much that has hitherto appeared inexplicable in British policy relative to slavery and the slave trade in Brazil as well as Central America. Wishing to secure the monopoly of the production as well as manufacture of cotton for the world, and believing that her East Indian possessions could produce the necessary supply, Great Britain sought, during the half of the present century, to procure the abolition of slavery in the United States, and thereby destroy the cotton culture of the South; and willing to supplant Brazil in the growth of coffee, as she has already supplanted her in the production and supply of indigo, she has succeeded in finally suppressing the slave trade of Brazil, and hopes to effect its ultimate abolition and reduce that most prosperous of all South American countries to the same social and industrial condition as St. Domingo and Jamaica—desolated, paralyzed, powerless for competition, and useful as an obedient ally.

But if Great Britain looks at Brazil with envy, there are other countries which she contemplates not without jealousy and apprehension of future competition, and the possibility of coffee being cultivated with slave labor in Central America suggested, doubtless, the clause in the late treaty with Honduras, binding the latter to prohibit slavery. It is this feature of British policy, too, that has caused her diplomats to be so strenuous in their efforts to counteract American colonization in Central America. To give us a foothold there, argue the British statesmen, is to give us, in addition to our present control of the growth and supply of cotton, a *point d'appui*, from which we may, with the assistance of slave labor and the management peculiar to our planters, gradually get into our hands the largest production of coffee, as well as sugar, in the world. They are not ignorant also, it is probable, that contiguous to Central America are the Mexican provinces bordering on the Tehuantepec transit, which are better adapted to coffee than any portion of British East India, and which, in American hands, would wrest from Great Britain the anticipated monopoly, even if she should succeed in breaking down the Brazilian coffee culture. Is such a result impossible? He who looks keenly into the possibilities—nay, probabilities of our future relations with Mexico, will not hastily express a doubt of such a consummation; and if our statesmen and diplomatists would favor us as much as geographical facts, political tendencies and ethnological principles, we believe we should hold in our hands, at no distant day, the triple key of commercial empire—to-wit: cotton; coffee and sugar.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r st.	When Payable.	Where Payable	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Length of Road	Capital Authorized.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
1,000,000 00	6			1860	1st mortgage.	173	Al & Andria, Lon & Hamp'sr		173	6,000,000.00				
498,800 00	6			1862-3	2d "	5455	Androskog'n & Kennebec		5455	1,300,000.00		209,475.46	110,246.98	none.
199,000 00	7	July & Jan.			Domestic.		Atlanta and LaGrange...		86.6	1,000,000.00	120,000.00	278,123.74	123,750.74	4 pr. ct. 6m
52,646 26	6			now	"		Bng'r, Old T. & Milford...		12.5	135,000.00	52,646.26	29,104.40	2,671.61	15,000 in '53
500,000 00	7		N. Y.	1860	"	44 5-8	Boston & Worcester...		44 5-8	4,500,000.00	500,000.00	1,102,781.90	437,062.03	180000 4.6m
500,000 00	7			1866	1st mortgage.		Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000 00	7			1857-9-62	Income.		"							
200,000 00	7			1864	Domestic.		"							
577,187 00	6			1872	4th mortgage.	30	Central Ohio.		30					
192,200 00	7			1874	2d "	43	Champlin & St. Lawrence		43	1,872,800.00	1,001,087.00	162,260.00	77,700.00	10 per ct.
320,000 00	7				Domestic.		Chrl'te & South Carolina.		110	1,750,000.00	280,000.00	291,219.86	47 per ct.	\$72,300
1,740,000 00	6-7-8		N. Y.	1864-7	1st mortgage.	128	Chgo, Burl'ng'n & Quincy.		128	3,746,900.00	2,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,200,000 00	8			1868-9	2d "		"							
374,000 00				1868-76	Convertible.		"							
1,200,000 00					1st mortgage.		Chicago, Fulton & Iowa.		131	1,761,149.16	2,241,500.00	221,491.96		
532,000 00					2d "		Cin. Will'ng'n & Zanes'ville							
104,000 00					3d "		"							
305,500 00					Income.		"							
540,000 00	6			1873	1st mortgage.	85	Cleveland & Mahoning...		85	1,500,000.00				
400,000 00	7			1861	2d "		"							
000,000 00	7			1873			Cumberland Valley...		52	1,212,200.00		160,511.56	81,101.56	\$32,250.24
500,000 00	8			1857-8-9	1st mortgage.	52	Dayton & Cin. short line.		52	1,000,000.00	1,000,000.00			
						136-10	Eastern Railroad...			3,245,560.00		665,578.79	288,077.94	\$34,133
350,000 00	7				1st mortgage.	130	East Ten. & Virginia...		130	625,500.00		30,895.50	19,692.30	
740,000 00	10			1869	1st "	20	Essex Railroad...		20	700,000.00				
88,000 00	10			1861	2d "	109	Evansville & Crawf'd'vle		109	2,228,657.00		248,970.42	136,661.90	\$133,281.45
400,000 00	10			1864	1st mortgage.		The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	212,837.61	3 per cent.
200,000 00	10			1876	2d "	23	Fox River Valley...		23	800,000.00				
							Fair Haven Branch...		15	500,000.00		50,281.33	14,222.45	\$166,230.00
100,000 00	6				1st mortgage.	233	Georgia R.R. & Banking Co.		233	4,156,600.00		1,068,212.50	357,689.32	\$86,240.00
100,000 00	6				2d "	20	G't Falls & Conway R.R.		20			27,576.09		
300,000 00	6-1-9			1858	1st "	281 1/2	G't West'n R.R. of Can.		281 1/2	4,191,550.00		2,068,836.00		5 pr. ct.
4,000,000 00	7			1869-70	1st "	74	Housatonic Railroad...		74	2,400,000.00		389,106.50	176,529.99	
2,000,000 00	7			1860	2d "	144	Hudson River...		144	4,000,000.00		1,924,382.44	718,037.40	
1,812,000 00	7			1875	3d mortgage.	144	"		144	4,000,000.00				
2,885,000 00	7			1876	1st "	101 1/2	Illinois Central R. R.		120 1/2	17,000,000.00		1,532,117.00	562,221.00	7 pr. ct.
4,115,000 00	7			1860	2d "	704	"		704	17,000,000.00				3 pr. ct.
3,000,000 00	7				1st mortgage.	20	Indiana Central...		72 4			354,871.00		
600,000 00	7	Nov. 1			2d "		"							
700,000 00	7	Jan. & July 1		1862	1st mortgage.	13	Iron R. R.		13	123,700.00				
50,000 00	7						Kentucky Cen. 2d Div.			712,500.00				
700,000 00	7						Knoxville & Kentucky...							
						32	Laurens (S. C.) R. R.		32	166,000.00		22,233.59	14,233.59	
218,000 00	7			1866	1st "	12 3/4	Lowell & Lawrence...		12 3/4	300,000.00		50,244.71	14,149.13	\$2,000
1,000,000 00	7			1875	2d "		Mad River & Lake Erie...			2,697,000.00		587,236.57		10 pr. ct.
1,000,000 00	6			1868	1st "		"			2,697,000.00			162,277.50	
2,000,000 00	7			1874	2d "	26	Manchester & Lawrence...		26	1,000,000.00				\$24,000
2,500,000 00	7			1867	1st "		Marietta & Cincinnati...							
2,000,000 00	7 and 8				1st mortgage.	27	Mexican Gulf R. R.		27					
60,000 00	8			1881	1st "	30	Milwaukee & Horicon...		30					
420,000 00	8			1868	2d "	32	Mineral Point R. R.		32					
321,000 00	8			1884	1st "		"							
320,000 00	6			1869	1st mortgage.	15	Mobile & Ohio...		497	10,000,000.00		253,492.96	162,802.24	
6,000,000 00	7			1873	1st mortgage.	55	Nashua & Lowell R. R.		55	600,000.00		19,752.42	55,501.74	7 pr. ct.
500,000 00	7			1864	2d "	153	New Haven & Northm'tn		153	922,500.00		1,040,932.26	324,291.57	2 pr. ct. 6m
411,700 00	6			1863	1st "		N. Y. & Harlem R. R.			5,717,100.00				
500,000 00	6					50	N. Y., Prov. & Boston...		50	1,508,000.00		245,713.00	64,678.71	\$37,692.30
300,000 00	6					66	N. Lon. Wilm'm'tn & Pal.		66	1,700,000.00		120,571.50	51,544.40	
						6	Pontchartrain R. R.		6	600,000.00		116,795.00		\$25,000
1,500,000 00	6			1873	1st mortgage.	62 1/2	N. O., Opelousa & Gr. West.		62 1/2	3,000,000.00		1,007,686.48	366,118.26	7 pr. ct.
1,000,000 00	6			1873	2d "	103 1/2	N. Y. & New Haven...		103 1/2					
2,000,000 00	6			1859	1st mortgage.		North Western Va. R. R.							
1,500,000 00	7			1877	1st mortgage.	118	Norfolk & Worcester R.R.		118	2,000,000.00		600,000.00		7 pr. ct.
3,000,000 00	5			1860		192	"		192			25,170.74		
419,300 00	6					60	Ogd'sb'g, Clay'tn & Rome		60	2,111,500.00		304,239.33	88,458.56	2 1/2 pr. ct.
221,800 00							Ontario, Simcoe & Huron		94			289,690.10		
470,000 00	6			1866	1st mortgage.	88 3	Orange & Alexandria R.R.		88 3	2,957,500.00		276,339.02	137,875.93	5 pr. ct.
1,500,000 00	7			1876	2d mortgage.		"							
300,000 00	8			1863	1st mortgage.	47	Peoria & Bureau Val. R. R.		47	1,500,000.00				
300,000 00	8			1873	1st "		"							
250,000 00	6			1861	1st mortgage.	28 1/5	Philadelphia & Trenton...		28 1/5	1,000,000.00				6 pr. ct.
500,000 00	7			1864 to 1874	1st "	47	Portsmouth & Concord...		47					
						76	Potsdam & Watertown...		76	2,100,000.00				
1,200,000 00	6			20 years.	1st mortgage.	62 1/2	Rutland & Washington...		62 1/2	950,000.00		68,325.42		
						86	St. Louis & Iron Moun. R.R.		86	6,000,000.00				
						168 2/3	Salem & St. Louis R. R.		168 2/3	400,000.00				
						116	Snd'sky, Mans'd & New'k		116					
						26	Sullivan Railroad...		26	500,000.00		75,246.06	19,950.64	
							"							
						145	Tennessee & Alabama...		145			39,586.44	17,378.08	
						73	Terre Haute & Richmond		73	1,294,450.00				11m. 12 pr. ct
				1861	1st mortgage.	212	Toledo, Wabash & Western		212					
				1840	2d "		Troy & Boston...			1,000,000.00				
				1875	3d "		"							
							Vicksburg & Jackson...		46					
						215	Virginia & Tennessee...		215	3,000,000.00		322,048.60	165,576.24	
						31	Westchester (Pa.) R. R.		31	165,000.00				2 pr. ct.
						171	Wilmington & Manchester		171					
							"							
						32	Winchester & Potomac...		32					
						43 69	Worcester & Nashua...		43 69					
2,500,000 00					1st, 2d, 3d "		"							
596,000 00	7				1st mortgage.		"							
200,000 00	7				2d "		"							



## CINCINNATI STOCK SALES.

AT THE STOCK BOARD.

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending March 25, 1857.

## BONDS.

\$3,000 Indiana Central R. R. Co., 7 per cent. 1st Mortgage Bonds.....	80
5,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds.....	81
2,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. bonds.....	60
1,000 Ohio & Mississippi R. R. Co. 7 per cent. 1st Mortgage Bonds.....	75
6,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. bonds.....	67½
3,000 Hillsboro & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds.....	50
1,000 City of Cincinnati 5 per cent. Bonds.....	75
2,000 Cin. Ham. & Dayton R. R. Co. 7 per cent. 2d mort. Bonds.....	85
1,500 Ohio Central R. R. Co. 7 per cent. 4th Mortgage Bonds.....	30 and int.
1,250 Marietta & Cincinnati R. R. Co. 7 per cent. Domestic Bonds.....	40
800 Ohio & Mississippi R. R. Co. Scrip.	33

## STOCKS.

200 Shares Southern Pacific.....	75
50 " do do.....	70
200 " do do.....	66½
244 " Ohio and Mississippi.....	10½
300 " do do.....	11
400 " do do 60ds.....	11½
56 " Dayton & Western.....	20
80 " Eaton & Hamilton.....	18½
15 " Cin. Ham. & Dayton.....	70½
100 " Little Miami.....	92
100 " do do 60ds.....	93½
20 " do do cash.....	93
75 " Ohio Central.....	15
36 " Columbus & Xenia.....	91½
200 " Marietta & Cincinnati, 60ds	19 and int.
100 " Cin. & Chicago.....	2½
20 " Cincinnati Ins. Co.....	86
8 " do do.....	90

## MONETARY AND COMMERCIAL.

We have had another week of great activity in commercial circles. The jobbing houses are actively engaged receiving and shipping goods. The amount of orders and personal purchases this spring has been very heavy.

The money market, during the week, has exhibited a slightly improving tendency. The change is, however, but slight, and, as we approach the 1st of the month, may hardly be expected to continue. The supply of good paper, although pretty generally provided for by the regular houses, has still extended to the street; and we quote rates at 10 to 12 per cent. for first class. Considerable outside capital is seeking permanent investment here at 8 to 10 per cent.; the latter being the prevailing rate.

Eastern exchange, which, at our last dates, sold at ¾, has advanced again to 1 per cent. selling and ¾ buying rates. We shall not have much ease in the discount market while this continues. Eastern banks will not send their circulation here to have it returned within ten days with a demand for the gold. New Orleans exchange is slow of sale, at par to ¼ and ½ premium.

Stocks have been active during the week, at fair prices. Transactions will be seen by our quotations to be large.

From the East we have advices of an easier market for money, without much change in stocks. Illinois Central is lower, in consequence of a notice that the capital stock of the company would be increased \$8,500,000.

The excess of importations over exportations causes the drain of specie to continue, and interferes with the influence of the causes that would otherwise render the money markets of this country, at the present moment, easy.

The movement in the stock market in the past week has been steady, at very full prices. Our transactions embrace Little Miami shares at 92, at which price there has been an active demand; we also note one sale of 100 shares at 93½ on 60 days. Of Hamilton & Dayton there

is little now on the market; we report one small sale at 70½. Holders of this stock are looking for better prices. In the fancies we report sales of 934 shares Ohio & Mississippi at from 10½ to 11½—the latter on 60 days' credit; 200 shares Hillsborough & Cincinnati at 19, 60 days. The securities of these two roads are, in view of their early completion, attracting much attention. This important event will, we are informed, certainly occur within the coming month.

In Bonds we note sales Indiana Central 1st mortgage 7s at 80; Little Miami 6s at 81; Covington & Lexington 1st mortgage 7s at 67½.

The money market is gradually growing easier; we hear of less paper in the street the past week than for some time previously; rates of discount have not much changed. New York exchange is firm and in demand, at ¾ to 1 per cent.—the latter rate for bankers' checks. New Orleans funds are dull and in limited demand, at ½ to ¾ premium. Business, in all departments of trade has opened actively, and promises to prove satisfactory, in amount and character, to our merchants.

## NEW YORK STOCK SALES, March, 23, 1857.

\$5,000 Virginia 6's.....	91½
25,000 Missouri State 6's.....	84½
500 N. Y. Central 7's.....	101½
1,000 Erie R. C. Bonds, 71.....	80½
5,000 Erie Railroad Bonds, 1875.....	92
1,000 Hudson Riv. R. R. 3d Mortgage Bonds.....	66
3,000 Michigan S. S. F. Bonds.....	79
4,000 Ill. Cent. R. R. Bonds.....	101½
1,000 N. J. Cent. 1st Mortgage Bonds.....	92
700 Shares N. Y. Central R. R.....	89½
500 " Erie R. R. stock.....	53
6 " Hudson River.....	29
100 " Harlem.....	14
500 " Reading.....	78½
100 " Mich. Cent.....	95½
250 " Mich. So. & No. Ind.....	73½
50 " Panama.....	93
200 " Illinois Central R. R.....	129
104 " Cleveland & Pittsburg.....	54½
25 " Galena & Chicago.....	104
15 " Cleve. C & Cin.....	101½
650 " Cleveland & Toledo.....	73½
200 " Chicago & Rock Island R. R.....	105½
25 " Wis. & L. S. RR.....	59½
60 " Milwaukee & La Crosse.....	75½
50 " Mil & Miss.....	73½

## SILVER, GOLD, LEAD,

## And Other Minerals.

ON THE PROPERTY OF THE  
Sonora Exploring and Mining Co.,

NEAR TUDAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

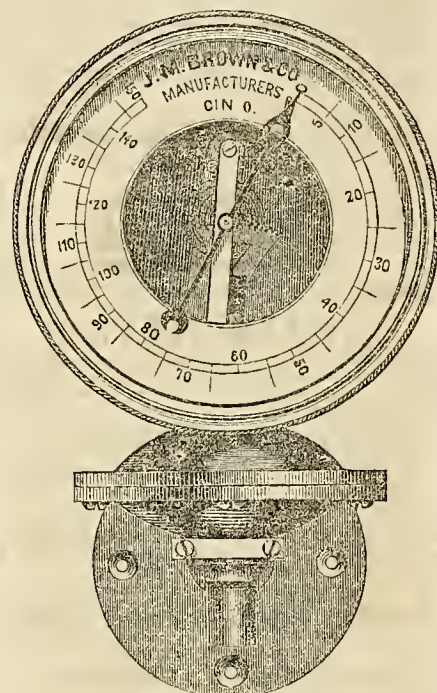
The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

## J. M. BROWN &amp; CO.,

MANUFACTURERS OF

IMPROVED  
Corrugated Steel Spring Gauges,  
FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar26 250 East Front street, Cincinnati, O.



## HENRY WARE,

MANUFACTURER,

No. 25 East Fourth street, opposite the Post Office, Cincinnati, Ohio, has on hand a large supply of

Transits, Levels, Theodolites, Compasses, Telescopes, Drawing Instruments, &c.,

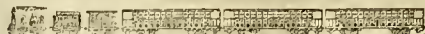
Of best quality, and at reduced prices.

Repairing done with neatness and dispatch.

Railroad Baggage Checks made to order.  
ap10-6m.



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12.30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6.30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton

THE A Steamer leaves Racine for Chicago every evening at 10.30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President,  
ROBERT HARRIS, Ass't Sup't. aug14

## Harlan & Hollingsworth,

WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

### MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAILROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

### WASON'S

## CAR MANUFACTORY,

Near the Pittsburgh R. R. Shops,

CLEVELAND, OHIO.

Passenger, Baggage, Freight, Dumpers, Hand Cars, &c.,

Of the best quality in all respects, style, workmanship and material, made to order with promptness.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

CHARLES WASON,  
Late of the firm of T. & F. Wason, Springfield,  
Massachusetts. toc20

### PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above MILL, in connection with their improved Hatched Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
Feb 27 LEE & LEAVITT.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

\*Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [Jan 1-15] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,

PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanters, Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylindor Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Bull's Patent Jack Screws

### Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-1y

## E. MENDENHALL,

MAP, BOOK & PRINT SELLER,

Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES DRAWING INSTRUMENTS, &c.

Publisher of the

Railway Map of the Western States,

In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON CO. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

MAPS OF EVERY DESCRIPTION.

mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be molded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS, Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN and NOY E METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK,

Also, for Water Gauges, Indicators, Steam Whistles CHAS. W. COPELAND, Consulting Engineer,

64 Broadway, N. Y.

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman, CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mar1-1y

## GREAT WESTERN Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Book and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

Feb 28

CORBY, GOSSIN & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE &amp; CRAWFORDSVILLE, and the TERRE HAUTE &amp; ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

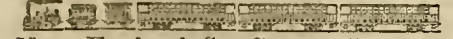
Leaves Indianapolis at 11:30 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducting. Sold at wholesale at great discount from list prices.

oct3-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4	hours
To Cleveland in.....	8½	"
To Dunkirk in.....	14½	"
To Buffalo in.....	16	"
To Albany in.....	26	"
To New York in.....	31	"
To Boston in.....	35	"
To Crestline in.....	6	"
To Springfield in.....	14	"
To Philadelphia in.....	31	"
To Wheeling in.....	10	"
To Baltimore in.....	28	"
To Washington in.....	29	"
To Steubenville in.....	1	"

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jy17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**Freight.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

jan2.

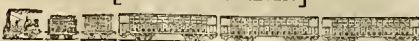
1856.

1856.

Winter Arrangement.

1856

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST.

## FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Springfield for Columbus; at Urbana with Columbus and Piqua trains East and West; at Bellefontaine for Crestline, Pittsburg, Philada.; at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities.

Same train connects at Dayton for Dayton & Michigan Road to Troy, Piqua, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburg.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 5:40 A. M., and Chicago 2:00 P. M. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

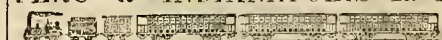
Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:30 A. M., and 5:30 P. M. For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

HENRY O. ANES, Sup't.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R., make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Fr'ght. Ag't.

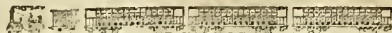
Indianapolis, Sept. 16, 1856.

[mh29-Jy.]



**KENTUCKY LOCOMOTIVE WORKS.**

CORNER OF KENTUCKY AND TENTH STS.  
LOUISVILLE, KY.



THE Proprietors of the Kentucky Locomotive Works would respectfully inform Railroad Companies and the public generally that, having completed their establishment, they are now prepared to receive and execute orders with fidelity and dispatch.

They will contract for

Locomotives, Passenger, Baggage, Freight, Gravel and Hand Cars,

Of every style and pattern, as well as all kinds of Stock and Machinery required for railroads.

Particular attention will be paid to repairing, for which they have every facility.

They are also prepared to contract on favorable terms for building all kinds of Machine Tools, such as Turning Engines, Lathes, Planers, Drills, Slotting, Splitting, and Shaping Machines, of every variety of pattern.

Having also a large FOUNDRY connected with the establishment, orders for Castings are solicited, and will be filled with promptness.

Car Wheels of any pattern can be furnished on short notice. Double and single plate and Spoke Wheels of all sizes constantly on hand.

Communications or orders must be addressed to  
J. E. & T. F. OLIMSTED, TENNIS & PECK,  
Louisville, Ky.

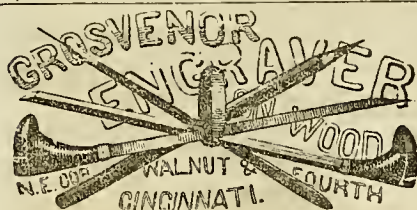
**Norris' Locomotive Works.**

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
RICHARD NORRIS & SON



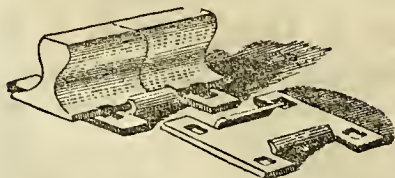
## Frosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Seal-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Cure Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tires.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

**RAILROAD SPIKES.**

WROUGHT IRON

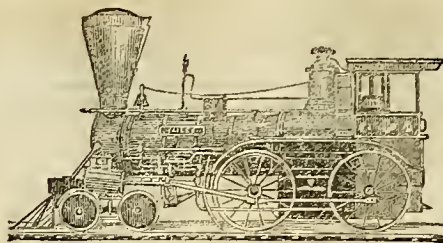
**Chairs and Fastenings.**

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all PATTERNS, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with despatch.

J. HOPKINSON SMITH,  
No. 25, South Charles st.

Please direct the name in full.  
Baltimore August 31-7

**LOCOMOTIVE WORKS.****NILES & CO.,**

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1856-6m.

**RAILROAD IRON.**

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

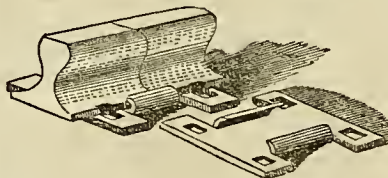
VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

**A. B. LATTA'S****Patent Mercurial Steam Gauge,**

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

apl7 A. B. & E. LATTA.  
J. D. GREEN. C. S. GREEN.

**CINCINNATI RAILWAY****CHAIR WORKS,**

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

**Wrought Iron Chairs.**

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.  
J. B. GREEN & BRO.

Feb. 14 ly.

## THE SCHENCK MACHINERY DEPOT

AND  
Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

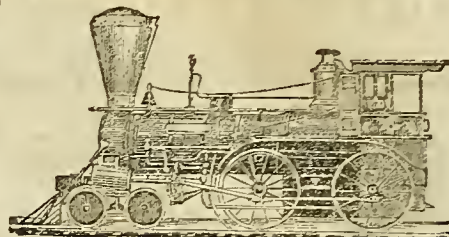
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

**Oak-tanned Leather Belting,**

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 17

**CINCINNATI  
LOCOMOTIVE WORKS.**

THE undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, belts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

**Railroad Car Findings**

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws.

**LOCOMOTIVE ENGINE LANTERNS,**

From the best Manufacturers, and at their prices. Car,  
Haud, and Signal Lanterns.

**Cotton Duck for Car Covering,**

Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver Plated Trim mings for Windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other Articles pertaining to Cars.

ALBERT BRIDGES.

Lata Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass  
toct

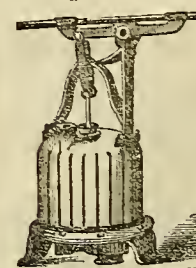
**GEO. D. WINCHELL & BRO.,**

172 Elm Street, between 4th & 5th,

CINCINNATI, O.,

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

**Compounded Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and, in all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

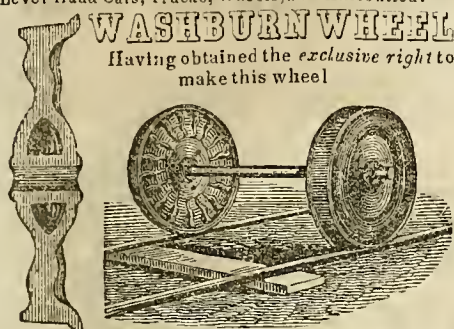
Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.  
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1853



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Haul Cars, Trucks, Wheels, and Axles fitted.



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL.

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed **DOUGLASS, SMITH & CO.,** Janl. Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

## Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Haul Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 16<sup>th</sup> \* **JOSEPH DAVENPORT.**

## S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars, Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2<sup>d</sup> NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855.**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-1y 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW,** 157 Broadway, N. Y.

## ALBERT N. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
**LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS.**  
190 Water Street New York.

## RAILROAD MAP OF UNITED STATES

NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55 3 College Hall, Cincinnati O.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July 31

## THOMAS D. STETSON, Mechanical Engineer,

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc22

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

**P. DUDLEY,**  
an g14-1y President of the Board.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Eric" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. feb19-1m

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** no13 10 Wall st., near Broadway, New York.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw end Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA. Aug

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

**A. H. GOODMAN & CO.,**  
Feb. 7, '56-2m.1 no. 7 Wall st., N.

## RAILROAD CAR

## AND COACH TRIMMINGS.

## DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

**Plain and Figured Mohair Plush,**  
Printed & Unsat do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Emameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width;**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

**FOR CUSHION & MATTRESS FILLING.**  
N. B. We have the Plush in bond for exportation.  
sep18 **DOREMUS & NIXON.**

## RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts, Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1600 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

**PATENTED APRIL, 1866.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point for which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 52d street, N. Y.

**T. F. RANDOLPH & BRO.**

Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern mend-ers.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

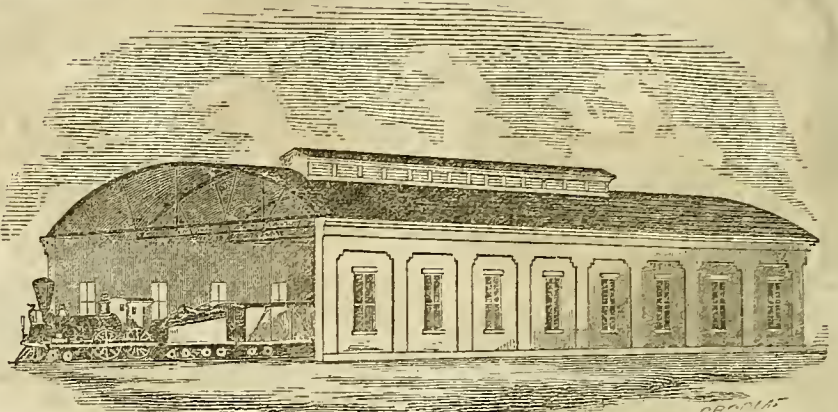
BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-ly 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



Office, No. 57 West Third Street,  
CINCINNATI, OHIO.

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of iron supporting now in use, and no more than good wooden Trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

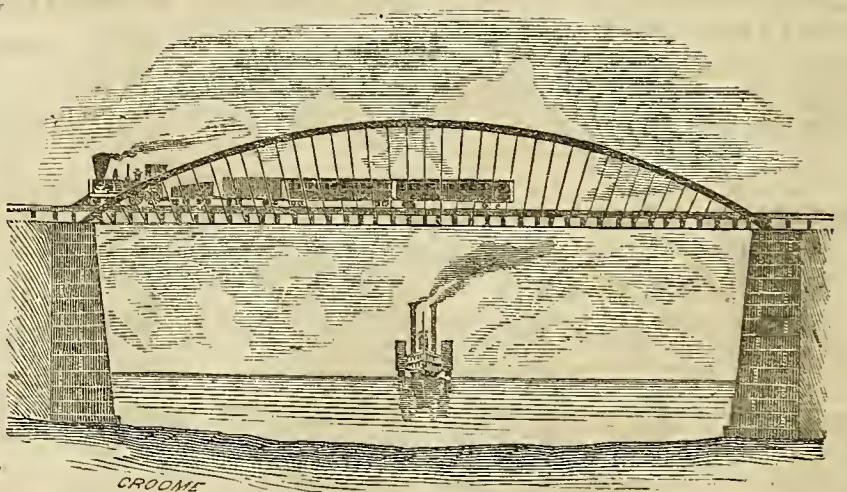
MOSELEY, WINSTON & MOSELEY.

January 1st, 1856.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *tube iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by responsible obligations.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

THOS. W. H. MOSELEY.

Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - Editor.  
W. WRIGHTSON, Associate Editor.

CINCINNATI:

THURSDAY MORNING,.....APRIL 2, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS—	
One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers, and Proprietors,

### CONTENTS.—NO. 6.

#### EDITORIAL.

Agriculture of the United States.....	81
Consulting Engineer.....	81
Sectional Map of Nebraska.....	81
Defalcation on the New York Central R. R.....	82
Skeel's Patent Machine for Shearing Sheet Metals.....	82
Brevities.....	82

#### RAILROAD DAGGERREOTYPES.

Peoria & Bureau Valley R. R.....	83
Ontario, Simcoe & Huron R. R.....	83
Sullivan R. R.....	83
Portsmouth & Concord R. R.....	83

#### RAILROADS.

Mobile & Ohio R. R.....	84
Cincinnati & Macon R. R.....	90
Baltimore & Ohio R. R.....	90

#### MISCELLANEOUS.

Accidents—Demolition of Property—Parliamentary Return.....	87
Manufacture of Copper, and Obtaining Gold and Silver from Cuperoous Ores.....	91

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	89
London Quotations.....	90
Cincinnati Stock Sales.....	90
Monetary and Commercial.....	90
Sales at the New York Stock Board.....	90

**CONSULTING ENGINEER.**—Our readers will find in our columns the advertisement of Chas. Ellet, Jr., who offers his services as Consulting Engineer in the preparation of plans and the location of public works. Mr. Ellet brings with him the prestige of a life spent in useful and successful practice and can point to many of our noblest triumphs of internal improvement as the results of his labors and skill.

**SECTIONAL MAP OF NEBRASKA,** Compiled from the Field Notes in the Surveyor General's Office, by ROB. L. REAM; showing the Counties, Townships, Sections, Cities, Villages, and all the Internal Improvements.

We have received a copy of this map from the publisher, E. Mendenhall, Walnut street, who has also the Sectional Map of Kansas; either of which he will mail free on receipt of the price, \$1.

VOL. 5.—No. 6.

### AGRICULTURE OF THE UNITED STATES.

There can be no subject more interesting either to the people or to philosophers. The whole subsistence of mankind depends upon it; and not only that, but all the relations of business, of commerce, industry and human happiness arise solely from the development of agriculture. The Agricultural Statistics taken in 1850 contain many interesting developments. That year was not, however, of itself, enough to determine all the problems relating to American farming; for in any one year there are some crops which partially fail. There are some things, such as the size and value of farms, and the proportion of improved lands, which are determined with considerable accuracy, although, of course, their proportions vary with the growth of the country. The following table will show the relation between the number of farms and the number of people in the principal States of each section:

States.	Farms.	Population.	Rstlo.
Maine.....	46,070	283,169	1 to 13
Massachusetts.....	31,069	994,514	1 to 30
New York.....	170,821	3,097,294	1 to 18
Pennsylvania.....	127,576	2,311,786	1 to 19
Virginia.....	76,013	1,421,661	1 to 19
North Carolina.....	57,963	869,039	1 to 15
Tennessee.....	72,735	1,002,017	1 to 15
Louisiana.....	13,422	517,762	1 to 40
Ohio.....	143,808	1,980,329	1 to 14
Indiana.....	93,896	988,416	1 to 11
Illinois.....	76,208	851,470	1 to 11

Here we see the largest number of farms in proportion to the inhabitants is in the Northwest; and the smallest number in Massachusetts and Louisiana. The reasons for this are quite obvious. As a general principle, the number of farms will be less where there is most of the *civic*, or city and manufacturing population. On the other hand, there will be the largest number of farms in those States where the population is chiefly farming or planting; but there is a modification to this in the laws and customs subdividing estates. Thus we see Louisiana has the smallest number of farms, although it is a planting State. The reason is, that in Louisiana the culture of sugar and cotton requires large plantations. In Ohio—although one of the most purely agricultural States—there is but little more than one farm to three voters; so that, in fact, after allowing for the inhabitants of the towns, not more than one-half the voters are freeholders.

Let us consider now the number of acres to a farm, and the amount of improved land. Let us take one State from each of the great sections as an example:

States.	Farm Lands.	Average.
Massachusetts.....	3,356,009 acres.	99 acres.
New York.....	19,109,084	113
Virginia.....	26,152,311	340
Tennessee.....	18,984,022	261
Ohio.....	17,997,493	125

Here we see that Virginia, with, relatively to Ohio, a small number of farms, has them of large size; and so Ohio, with a greater number of farms, has them of smaller size; but this rule does not hold in Massachusetts, where there is not only a smaller number of

farms, but a smaller average size. The reason is obvious: Massachusetts has a small surface, and an immense town population.

The improved land in the above five States, with the proportion to population, is as follows:

	Improved Lands. acres.	Proport. acres to 1 person.
Massachusetts.....	2,133,436	2
New York.....	12,408,964	4
Ohio.....	9,851,493	5
Tennessee.....	5,175,173	5
Virginia.....	10,360,165	7

If these States all produced the same average per acre, it is plain that Virginia would raise the largest surplus—Ohio and Tennessee next. But this is far from being the fact; and, in order to show which are the largest producing States, we will give the following table of average productions per acre:

	Wheat.	Corn.	Oats.	Potatoes.
New York, bush.....	19	27	25	100
Ohio, “.....	12	36	21	75
Tennessee, “.....	7	21	19	120
Virginia, “.....	7	18	13	75

It will be seen that Ohio is, in this table, far superior to Virginia, and above Tennessee. When this is combined with the results in the other table, we see at once what the statistics of production also inform us, that Ohio is far ahead in the production of surplus food for export.

We may close this view of Agriculture with the relative value of farms. Take, for example, the following States:

	Average acres per farm.	Average value.	Value per acre.
New York.....	113	\$3,250	\$30 00
Pennsylvania.....	117	3,197	28 00
Virginia.....	340	7,021	21 00
North Carolina.....	369	1,192	3 25
Tennessee.....	261	1,345	5 00
Ohio.....	125	2,495	20 00
Indiana.....	136	1,453	11 00

This is a very instructive table. We may draw from it, in connection with other well known facts, the following practical inferences:

*First,* That nearness to city markets, with every means of communication, greatly enhances the value of farms; as by comparing New York, Pennsylvania and Ohio with the other States above.

*Secondly,* That the subdivision of lands adds to their value.

*Thirdly,* That high cultivation, which subdivision and large population gives (as in Pennsylvania), adds to the value.

The various circumstances of the several States enable us to see these things very well illustrated in the United States. The true principles of agricultural prosperity can here be well understood; and it will be well for the people of the United States if they shall understand that the solid prosperity of any nation depends physically on the success of its Agriculture.

**BRIDGE FOR SALE.**—We would call the attention of our readers to an advertisement in another column, of a Wire Suspension Bridge for sale. This bridge is nearly new, having been erected over the Kentucky river only four or five years ago.



### DEFALCATION ON THE NEW YORK CENTRAL R. R.

The Albany papers give the details of one of those examples of breach of trust that make us ask, where shall we find good. It is in the case of an officer who won his position on the railroad by unswerving integrity in places of greater trust, and is therefore a more strange and lamentable example of human frailty. We trust that our railroad companies will not be slow to learn the moral that it teaches. A rigid system of accountability and regular thorough and systematic reports from the highest to the lowest officer on the road will alone prevent these shameful instances of dishonesty. The best of officers will be kept so by close watching and the sooner the worst ones are detected in their peculations, the better for the roads and for themselves.

The following details we learn from the Albany *Atlas* and *Argus* :—

Something over a year ago MARIUS SCHOONMAKER was appointed Comptroller of the Central Railroad. The duties of his department, as would be inferred from its title, related to the examination and supervision of the accounts against the Company. The collections of the Company did not ordinarily pass through his hands. At stations in the neighborhood of which there are banks, moneys collected for passengers and freight are deposited, in bank to the credit of the Treasurer of the Company, and drawn for by that officer at stated intervals. At some of the smaller stations, where there is no bank within a convenient distance, the moneys collected are transmitted with the report of the agent, to the Comptroller. The latter receives the money, and it is his duty to immediately deposit it in bank to the credit of the Treasurer. The reports showing the amounts of money transmitted, go into the hands of the proper bookkeeper, and his entries and the deposits in bank ought to agree, and are a check upon each other.

Early in the present month, the Assistant Treasurer, (Mr. Wilson,) a vigilant and faithful officer, in the regular routine of his duty, had an examination and the comparison of the bookkeeper's entries and the bank account, back to the time when his former similar examination had closed, and a deficit of \$45,000 was discovered—the deposits of Mr. SCHOONMAKER in bank being that amount short of the sum which the books showed he had received. This was all within the last four months. Mr. SCHOONMAKER's attention was called to the subject, and he promised to make an examination of the books and see how the facts were. He delayed to furnish an explanation, and on the matter being pressed by the Assistant Treasurer, he admitted that he had used the missing moneys.

Of course, Mr. Wilson at once reported the matter to his superior officers. They deemed it their first duty to obtain security for the funds thus withdrawn, and for this reason, we suppose, immediate notoriety was not given to the case. We learn that the officers of the Company have succeeded in obtaining security for the whole amount of the defalcation, and do not apprehend the loss of a dollar to the Company.

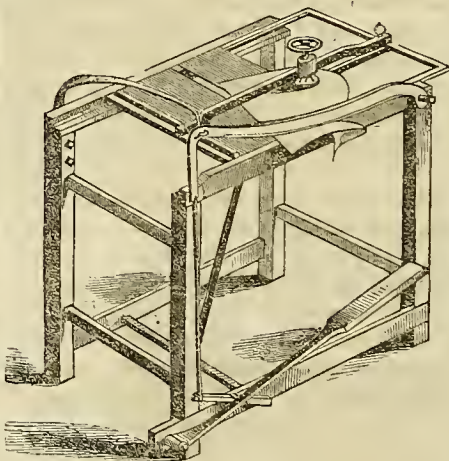
What circumstances of pecuniary necessity, or of temptation of any description, have led Mr. SCHOONMAKER into this unfortunate affair, we are not advised—if we were, we should take pleasure in stating them, as it certainly gives us pain to announce a transaction so fatal to the high reputation for integrity which he had previously enjoyed. Mr. S. has been considerably in public life. His former residence was at Kingston, Ulster County. He was a member

of the Senate from the Tenth District in 1850 and 1851. In 1852 and 1853 he was a member of Congress. On the accession of the Whig Party to power in January, 1854, he was appointed Auditor of the Canal Department. In the winter of 1855 he was transferred, on the nomination of Gov. CLARK and confirmation of the Senate, to the office of Superintendent of the Banking Department.

In the two last offices he gained such a reputation for "obstinate integrity" as a custodian of public funds, as led the Central Railroad Company to select him for the important and responsible post of Comptroller, and he resigned his position at the head of the Banking Department, to enter the service of the Company on a liberal salary. The appointment was fully justified by the reputation which he then enjoyed, and was generally deemed a fortunate one for the Company.

It is but just to the New York Central R. R. and its management to say, that no road in the world was ever better or more honestly managed. Its affairs have been conducted by straightforward business men of high integrity and more than ordinary capacity. We presume that there is hardly another road in the country where the peculations of such an officer would have been so soon discovered, or ended with so little actual loss to the road.

**SKEEL'S PATENT MACHINE FOR SHEARING SHEET METALS.**—This machine is a very simple arrangement for cutting sheet metals, in either straight or circular forms. The knife represented in front of the table is drawn down by a treadle and raised again by a spring.



The sheet to be cut is held to its place by the hand screw in the table. When it is required to make a straight cut, the table and hand screw remain stationary. When it is desired to cut a circle, the table and screw move parallel to the knife, and thus draw the sheet around in a circular shape. The diameter of the circle is graduated by the distance of the screw from the knife. The simplicity of this apparatus will commend itself to our mechanical readers. There is little in its construction to get out of order, and it is easily and rapidly set to cut any size of circle.

Below we give the card of several gentlemen who have examined it.

CINCINNATI, O., March 24, 1857.

We, the undersigned, having witnessed the operation of Skeel's Patent Machine, for

Shearing Sheet Metal, regard it as well adapted for cutting both Straight and Circular Forms, thus performing work which has heretofore required two machines.

We deem it a new and most decided improvement on anything of the kind now in use.

GEO. H. KNIGHT & BRO.

THOMAS KITE,  
M. GREENWOOD,  
ABEL SHAWK, Mechanician,  
EDWARD D. MANSFIELD, Editor Gazette,  
WM. R. THOMAS,  
J. R. HORROCKS.

### BREVITIES.

—CINCINNATI AND CHICAGO R. R.—This road will probably be opened to Logansport in June next. Four hundred tons of rails have recently been shipped to Richmond for this purpose.

—CINCINNATI, HAMILTON AND DAYTON R. R.—This company have just tested a new car brake, and from its satisfactory operation, have resolved to adopt it on all their trains.

—MILWAUKEE AND MISSISSIPPI R. R.—This road will be opened for through business on the 10th of April.

—NEW YORK CENTRAL R. R.—This company design to run a train from New York to Buffalo during the coming summer in 13 hours. Total distance 443 miles.

—ILLINOIS CENTRAL R. R.—The land sales of this company have amounted thus far to \$10,713,228 81.

—OHIO AND MISSISSIPPI R. R.—This road is soon to be opened for through travel, exclusively on its own line.

—MARIETTA AND CINCINNATI R. R.—This road is building a large freight depot in Cincinnati, east of the depot of the Little Miami R. R.

—DAYTON AND CINCINNATI SHORT LINE R. R.—At the recent election the following gentlemen were chosen Directors for the ensuing year: William Price, R. W. Lee, James Wilson, Jason Evans, George Hatch, G. H. Pendleton, E. W. Cunningham, J. W. Coleman, Edgar Conkling, Charles Reemelin, Henry Nye, Perry Pease, Charles Butler.

At a subsequent meeting of the Board the following officers were appointed: C. Reemelin, President; Wm. Price, Vice President; Jason Evans, Treasurer; John C. Thorp, Secretary.

—CIN., WIL. & ZANESVILLE R. R.—This company has removed its machine shops to Lancaster.

—NEW YORK & ERIE R. R.—The quarterly statement of this company, as published in the New York papers, shows a decrease of \$122,145 as compared with the gross earnings of the same period last year; and what is still worse, a decrease in the net earnings of \$257,747 24. This is the legitimate result of the systematic discharge of experienced employees, pursued during the past six months. With a change of management we hope to see a change for the better in the prospects of this road.



**Railroad Daguerrotypes.**

No. LXVI.

**PEORIA & BUREAU VALLEY R. R.**

The report of this company is dated December, 1856. The following are its officers:

President—N. B. JUDD, Chicago, Ill.  
Treasurer—CHAS. C. DURANT, New York.  
Secretary—WASHINGTON COCKLE, Peoria, Ill.  
Superintendent—JOHN F. TRACY, Chicago.

**DIRECTORS.**

N. B. JUDD, Chicago.  
HENRY FARNAM, "  
THOS. C. DURANT, New York.  
JOHN FRINK, Peoria.  
JOHN S. GRISWOLD, Peoria.  
CHAS. W. DURANT, Albany.  
JOHN HAMLIN, Peoria.

The CAPITAL STOCK is as follows:

Number of shares.....15,000.  
Price per share.....\$100.  
Capital.....\$1,500,000.  
Interest.....8 per cent. per annum.  
Am't of last dividend...4 per cent. 6 mos.

The DEBTS of the road are:

1st mortgage.....\$600,000.  
Interest.....7 and 8 per cent.  
When due.....1868 and 1873.  
Trustee.....Azariah C. Flagg.  
Interest payable.....1st Aug. and 1st Feb. in New York.

**DETAILS OF CONSTRUCTION.**

Length of road.....47 miles.  
Termini.....Peoria and Peoria Junction, on Chi. & R. I. R.R.  
Gauge.....4 feet 8 inches.  
Single track.....47 miles.  
Sidings.....5 "  
Weight per yard, rail...56 lbs.  
Kind of iron.....English.  
When laid.....1855.  
Kind of rail.....T.  
Ties.....2,250 per mile.  
Kind of wood.....White and Burr Oak.  
Length.....6½ feet.  
Size.....6 by 10 inches.  
Ballast used.....Gravel.  
Kind of fuel.....Wood.

The Chicago & Rock Island Railroad Co. has a perpetual lease on this road at \$125,000 per annum.

No. LXVII.

**ONTARIO, SIMCOE & HURON R. R.**

The report of this road is dated November 24, 1856. The following are its officers:

President—Hon. Jos. C. MORRISON, Toronto.  
Secretary and Treasurer—GEO. BEATTY, "  
Superintendent—J. LEWIS GRANT, "

**DIRECTORS.**

Hon. Jos. C. MORRISON, Toronto.  
JAS. MITCHELL, "  
D. MACDONNELL, "  
JOHN ARNOLD, "  
JOHN DUGGAN, "  
J. G. WORTS, "  
AND. DRUMMOND, "  
B. W. SMITH, Barrie, Ca.  
THOS. MACONCHY, Bradford, Ca.  
GEO. H. CHENEY, Toronto.

CHAS. J. ORTON, Fredonia, N. Y.

The ANNUAL MEETING of the stockholders is held on the third Wednesday in February.

**RUNNING EQUIPMENTS.**

Number of Locomotives..17.  
Passenger cars, 1st class..13  
" " 2d " 8.  
Baggage " ..... 4.  
Bag. & Ex. " ..... 2.

The following are the results of operation for the year 1856. Fiscal year ends June 30:

**RECEIPTS.**

Passengers.....\$141,087 55  
Freight.....138,150 55  
Mails.....10,340 00  
Miscellaneous.....12 00

**DETAILS OF CONSTRUCTION.**

Length of road.....94 miles.  
Termini.....Toronto & Collingwood, C. W.  
Gauge.....5½ feet.  
Single track.....94 miles.  
Branch to Bell Ewart...1.5 "  
Sidings.....3.6 "  
Length of rail-bars.....15, 18 and 21 feet.  
Weight per yard.....56 lbs.  
Kind of iron.....English.  
When laid.....From 1853 to 1855.  
Kind of rail.....T.  
Length of rail.....198.2 miles.  
Wear and tear.....20 per cent.  
Ties.....Oak, Hemlock and Pine.  
Length.....9 feet.  
Size.....6 by 6 inches.  
Ballast used.....Generally Gravel.  
Fuel.....Generally Hard wood.  
Telegraph on road.

No. LXVIII.

**SULLIVAN R. R.****OFFICERS.**

President—JNO. M. GLIDDEN, Charlestown, N. H.  
Treasurer—SAM'L ELDRIDGE, Boston, Mass.  
Secretary—P. C. FREEMAN, Claremont, N. H.  
Superintendent—GYLES MERRILL, Charlestown, N. H.

**DIRECTORS.**

JOHN M. GLIDDEN, Charlestown, N. H.  
JNO. S. ELDRIDGE, Boston, Mass.  
SAMUEL ELDRIDGE, " "  
J. W. CLARK, " "  
SPENCER, " "  
JONAS LIVINGSTON, Claremont, N. H.  
EDWARD THOMPSON, Charlestown, N. H.  
The ANNUAL MEETING of the stockholders is held on the last Tuesday in May.

The CAPITAL STOCK is as follows:

Number of shares.....5,000.  
Price per share.....\$100.  
Capital.....\$500,000.  
Interest.....6 per cent.  
1st mortgage.....\$500,000.  
Interest.....6 per cent.  
When due.....Jan. 1, 1856.  
Trustees.....Isaac Parker, Andrew T. Hall, — Parker  
2d mortgage.....\$254,000.  
Interest.....6 per cent.  
When due.....Aug. 1, 1861.  
Trustees.....G. H. Shaw, Waldo Flint, Geo. Olcott.  
Floating debt.....\$24,894 92.  
Interest.....6 per cent.

**RUNNING EQUIPMENTS.**

Number of Locomotives..5  
Passenger cars.....4.  
Baggage " .....2.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends May 1:

**RECEIPTS.**

	1854.	1855.	1856.
Passengers.....	\$33,004 19	36,490 87	33,691 12
Freight.....	33,782 81	41,349 28	38,439 45
Mails.....	2,759 97	2,087 71	2,315 45
Express.....	779 19	800 04	800 04
Cost of operation....	\$45,177 17	57,347 63	56,195 42

**DETAILS OF CONSTRUCTION.**

Length of road.....26 miles.  
Termini.....Windsor, Vt., and Bel-  
lows Falls, Vt.  
Gauge.....Narrow.  
Single track.....26 miles.  
Sidings.....2 12 "  
Length of rail-bars.....15, 18 and 21 feet.  
Weight per yard.....58 lbs.  
Kind of iron.....English.  
When laid.....1848.  
Kind of rail.....T.  
Wear and tear.....10 per cent. annually.  
Ties.....Oak and Chesnut.  
Length.....7½ feet.  
Size.....6 by 7 inches.  
How often changed.....From 5 to 8 years.  
Ballast used.....Gravel.  
Fuel.....Oak, Maple & Hemlock.  
Amount per annum...26,000 cords.  
Telegraph on road.

No. LXIX.

**PORTSMOUTH & CONCORD R. R.**

The report of this road is dated Nov. 25th, 1856. The following are its officers:

President—ALFRED W. HAVEN, Portsmouth, N. H.

Treasurer—THOS. L. TULLOCK, "  
Clerk or Sec'y—BRACKETT HUTCHINGS, "  
Agent and Sup't—JAS. W. EMERY, "

**DIRECTORS.**

ALFRED W. HAVEN, Portsmouth, N. H.  
NORTON D. WALKER, " "  
JOSHUA W. PEIRCE, Greenland, "  
NATHANIEL BATCHELDER, Epping, "  
ARTHUR FLETCHER, Concord, "  
NATHANIEL WHITE, " "  
WM. PLUMER, Lexington, Mass.  
The ANNUAL MEETING of the stockholders is held on the second Wednesday in May.

The DEBTS of the road are:

1st mortgage.....\$350,000.  
When due.....Jan. 1, 1861.  
Interest.....6 per cent.  
Interest payable.....1st Jan. and July.  
Trustees.....J. W. Emery, T. L. Tullock & Nathan'l White.

**RUNNING EQUIPMENTS.**

Number of Locomotives. 4.  
Passenger cars, 1st class. 4.  
Baggage " ..... 3.

**DETAILS OF CONSTRUCTION.**

Length of road.....47 miles.  
Termini.....Portsmouth & Concord.  
Gauge.....4 feet 8½ inches.  
Length of rail bars.....Mostly 18 feet.  
Weight per yard, rail...60 lbs.  
Kind of iron.....English.  
When laid.....1849, 1850 and 1852.  
Kind of rail.....T.  
Ties.....Cedar, Chesnut & Oak.  
Ballast used.....Loose sand.  
Fuel.....Wood.

The Treasurer's Report is as follows:

DR.	BALANCES.
Construction.....	\$1,022,698 89
Buildings and fixtures.....	15,538 13
Locomotives.....	20,974 94
Merchandise and dirt cars...	39,159 99
Passenger and baggage cars.....	9,600 00
Personal accounts liable to be absorbed in settlement, or worthless.....	16,467 70
Bills receivable, do.....	5,759 48
do available.....	392 86



Profit and loss.....	46,937 78
Collaterals.....	125,200 00

\$1,302,929 77

BALANCES.	Cr.
Capital Stock.....	\$174,430 15
Reduction of Capital Stock.....	134,191 45
Preferred Stock (new).....	211,700 00
" (old issue).....	200 00
Preferred Scrip.....	6,917 41
Transportation Company.....	5,252 37
Interest Scrip.....	2,386 40
Bonds payable Jan. 1, 1861.....	346,700 00
Coupons payable July 1, 1851.....	288 00
" Jan. 1, 1852.....	6,270 00
" July 1, 1852.....	7,644 00
" Jan. 1, 1853.....	8,481 00
" July 1, 1853.....	8,610 00
" Jan. 1, 1854.....	8,683 00
" July 1, 1854.....	10,389 00
" Jan. 1, 1855.....	10,443 00
" July 1, 1855.....	10,491 00
" Jan. 1, 1856.....	10,500 00
" July 1, 1856.....	10,500 00
Mortgage loan.....	4,700 00
Iron loan, between Epping and Raymond.....	24,697 73
Funded debt.....	62,000 00
Railroad notes, with sureties.....	23,253 15
" for money borrowed by Directors.....	44,010 00
" pretended individual liabilities.....	2,653 30
" with lien on land.....	1,221 37
" without individual liabilities.....	25,120 37
Personal accounts upon which creditors pretend individual liabilities.....	6,362 88
Personal accounts, stockholders not individually liable.....	9,262 19
Bonds as collateral.....	1,800 00
Capital Stock.....	67,200 00
Old Pref. ".....	45,200 00
New " ".....	10,900 00

\$1,302,929 77

## Railroads.

### MOBILE & OHIO R. R.

#### ANNUAL REPORT FOR THE YEAR 1856.

The report of the Directors for the year 1856 is one of great interest. It reviews the whole policy of the road, and gives a candid statement of its present position. The main facts which we learn are that the road has been extended during the year 44½ miles, and that the floating debt of the company has been reduced \$80,000. The report says:

"In the last annual report to the stockholders a full statement of the then financial condition of the company was presented, showing that the work had thus far been prosecuted upon local means, and that an indebtedness—incurred in anticipation of payment through the early negotiation of the company's securities—had been steadily accumulating until it amounted, in round numbers, to \$1,250,000, maturing in 1856; and which, with \$150,000 additional, would be required—to quote the language of the report—"to relieve the company from obligations already incurred, provided expenditures be at once stopped, and the work of construction in Mississippi entirely suspended."

"It was also stated in that report that the only resources of the company at command for the payment of such debts as could not be extended, and for the continuance of track-laying, were about \$400,000 of unsold income bonds, and the sterling bonds, which awaited a favorable turn in the foreign money markets before attempting their sale.

"These unsold bonds, therefore, some of which were hypothecated for debts previously incurred, constituted the only available means

for liquidating a large indebtedness, and continuing the construction of the road, when the present Directory came into office; all the revenue of the transportation department being required for the payment of interest.

"It became the first duty of the new Board to make, if possible, such financial arrangements as would relieve the company from its most pressing liabilities, and enable track-laying to go on until the supply of rails on hand should be placed in track ready for use. The President (Judge Hopkins) was accordingly instructed to proceed to New York, for the purpose of completing the preliminaries, preparatory to the departure of the Agent appointed by the previous Board to undertake negotiations of the sterling bonds in Europe. Meanwhile it was deemed advisable to advertise for proposals for the purchase of the income bonds still undisposed of, which was done; but, the bids being altogether unsatisfactory, were not accepted by the Board.

"Unfortunately for the interests of the company, \$71,000 of these bonds had been privately disposed of at a heavy discount a short time before the last annual convention of stockholders; the effect of which was to depreciate the market value of the remainder of the issue, so that, although the larger proportion had been disposed of by the company at par, the highest prices that could afterwards be obtained were 78 to 80 cents on the dollar. At these prices (mostly the latter rate) they have been sold from time to time during the year.

"With the means thus acquired, together with large additional sums raised upon the individual credit of seven of the Directors, who united for the purpose, the most urgent demands were provided for, and the work of construction prosecuted, until the supply of iron was nearly exhausted, and the present terminus reached at Macon, Miss., on fourth of July last.

"On the first day of January, 1856, the road was in operation to Lauderdale Springs, 153 miles from Mobile; on the 20th February to Gainesville Junction, 162½ miles; and, as before stated, on the 4th July, 1856, was opened to Macon, 197½ miles from Mobile; making 44½ miles added to the length of the road during the year; the average line in operation during the year being 180 miles.

The number of passengers transported over the road in 1856 was.....51,025  
And the number transported in 1855 was.....32,607

Increase the past year.....18,418  
Passengers, or about 67 per cent., while the aggregate mileage has increased from 1,573,533 passengers carried one mile to 3,508,779—a gain of 123 per cent.

"The gross earnings of the transportation department for 1856 were:

From passengers.....\$ 93,225 95  
From freights.....314,735 36  
From mails and express.....11,759 95

Total cash earnings.....\$419,711 26  
The gross earnings from public traffic in '55. 199,932 96

Increase in 1856.....\$219,778 30  
Equal to 110 per cent. gain over the business

of the previous year. The increased length of road upon which these earnings have been made is only 52 per cent. over the average line in operation in 1855.

The total expenses of the transportation department for 1856 amounted to.....\$202,102 05  
From which should be deducted amounts realized from sale of damaged freight, &c., 1,617 38

\$200,484 67

Equal to about 47¾ per cent. of the gross earnings, and showing an increase of 2¾ per cent. upon the per centage of expenses reported in 1855.

"In these expenses are included the cost of transporting rails, lumber, &c., for extension of road to Macon, which, estimated at one-third less than regular freight rates, amounted to \$43,604, chargeable to construction account; and which, added to earnings from public traffic, would make the gross earnings \$463,315 26, and reduce the expenses to about 43½ per cent. upon the amount of business done during the year.

"A comparison of the details of expenses for 1856 with the same table for 1855 will show a disproportionate increase of two classes of expenditure, to-wit:

Repairs of bridges and culverts, 1856.....\$10,631 40  
" " " 1855.....262 73

Increase 1856.....\$10,268 67

Paid for lost and damaged freight 1856, including \$74,972 for arrearages of 1855.....\$13,309 65

Paid for lost and damaged freight 1855.....3,508 01

Increase 1856.....9,801 64

Being an increase of.....\$20,070 31

Upon these two items alone. The first includes the cost of rebuilding Quitman bridge, and of renewing culverts, &c., destroyed by the freshets of January and April. Table No. 12 gives an analysis of the damage account, from which it will be seen that the damages paid for, resulting from the Dick's creek accident mentioned in last report, was \$4,373 47, and that \$9,670 62, or about 75 per cent. of the whole loss and damage account, occurred during the first six months of the year. Measures are being taken by the present Superintendent which, it is believed, will materially reduce the claims for non-delivery of freights, &c., the coming year.

"Tables Nos. 2 and 3 furnish a comparison of the leading articles of freight transported for three years past, and illustrate the great value of the road to the planting interests. Of the chief staple, Cotton, was

Transported in 1854.....5,793 bales.  
" 1855.....32,178 "  
" 1856.....74,885 "

Which will be increased in 1857, by the extension of the road to Okalona, to above 150,000 bales.

"The receipts of the company from all sources, for the year ending Dec. 31st, 1856, have been as follows:

Cash Balance, Jan. 1st, 1856.....\$202,975 26  
ON CAPITAL STOCK.

From installments—Mobile.....5,300 37  
" " Mississippi.....232,483 48  
" " Tennessee.....21,771 30  
" City tax of 1855.....520 47  
" " 1853.....5,571 22



From City tax of 1854.....	27,361 95
" " 1855.....	197,026 70
" " 1856.....	42,140 70
" Sundry subscriptions.....	225 82
<b>BONDS.</b>	
From city bonds of 1857 sold.....	22,000 00
From income bonds of 1861, proceeds.....	345,850 00
From Income bonds, 2d series, '62, proceeds.....	37,488 00
From Tennessee State Bonds.....	336,000 00
<b>LANDS.</b>	
From sale lots, Mauvila.....	107 15
From sale stations, &c. (donated lands).....	4,456 90
<b>BILLS PAYABLE.</b>	
From sundry bills payable.....	61,080 96
J. A. Tallafiero, Assist. Treas. Tenn., from Engineers' requisitions on him for work in Tenn., paid by Tenn. subscriptions.....	32,251 02
<b>MILL MACHINERY.</b>	
From sale of sawmills, &c.....	11,030 47
<b>SOSPENSE ACCOUNT.</b>	
From sundry sources.....	8,690 00
<b>TRANSPORTATION DEPARTMENT.</b>	
From gross earnings, including construction freights, for 12 months.....	505,859 95
From sundry individuals.....	23,818 72
Total receipts.....	\$2,118,380 44

"The total expenditures for the same period were as follows:

<b>CONSTRUCTION.</b>	
For graduation, masonry, bridging, &c.....	\$431,269 08
For superstructure, local work.....	93,910 91
For rails, fastenings, &c.....	203,092 58
For rails for Tennessee.....	413,789 09
For station buildings.....	15,497 13
For water fixtures.....	4,762 58
For repair shops.....	12,588 83
<b>ENGINEERING DEPARTMENT.</b>	
For surveys and locations.....	110 00
For construction.....	86,876 24
<b>REAL ESTATE.</b>	
For road purposes general.....	1,000 00
For station grounds.....	7,183 80
<b>EXPENSES.</b>	
For general and office salaries, &c.....	25,972 80
For commissions and agencies.....	31,371 93
<b>MACHINERY.</b>	
For locomotives, cars, &c.....	122,090 46
<b>RIGHT OF WAY.</b>	
For amount.....	3,769 50
<b>INTEREST.</b>	
For interest on city bonds of 1857.....	19,697 10
Do. State of Alabama loan.....	30,000 00
Do. Sterling bonds sold.....	1,971 53
Do. Foreign iron debt.....	65,042 51
Do. Income bonds.....	34,325 00
Do. Tenn. State bonds, January coupons.....	10,130 40
Do. Sundries, general account.....	48,500 82
<b>PADDOCAH BRANCH.</b>	
For superstructure (transferred from rails account).....	74,072 14
<b>TRANSPORTATION DEPARTMENT.</b>	
For transportation expenses paid this year..	177,154 27
<b>CITY BONDS.</b>	
For tax bonds of 1856-57 paid off.....	201,000 00
Total expenditure.....	\$2,115,174 21
Cash on hand.....	3,206 23
	\$2,118,380 44
<b>The total amount invested in the construction of the road, as far as reported at the Mobile office, to Dec. 31, 1856, is.....</b>	
	\$6,515,470 29
<b>And this amount has been derived</b>	
From payments on capital stock, including city tax bonds of 1857.....	\$3,155,128 33
From income bonds, Tenn. bonds and Ala. loan.....	1,601,710 37
From revenue of the road in operation, net.....	493,142 69
From sales of lots, sundries payable, &c.....	1,265,489 00
	\$6,515,470 29

The amount of indebtedness outstanding and unpaid Dec. 31st, 1856, after deducting city tax of 1856, set apart for the payment of bonds maturing 1st of April next, amounts to the sum of.....\$1,824,959 76 Being an increase of indebtedness over the previous year of.....180,028 74 The iron debt has been increased the past year, by the receipt of rails, &c. purchased in 1855.....258,597 24 Of which \$31,398 35 is for the Tennessee Division.

The local and floating indebtedness of the company has therefore been reduced during the year by the amount of.....\$78,568 50

"The income bonds and \$20,000 sterling bonds sold, are not included in this statement,

but all other obligations of the company are embraced, except the unpaid requisitions north of Macon, Miss., and in Tennessee, which are payable from the local subscriptions upon those divisions.

The total amount of railroad taxes assessed upon real estate from 1850 to 1857 inclusive, to be.....\$1,295,936 08 Of which has been collected and paid over.....967,773 34

Less the commissions, \$5,806 62; leaving a balance still uncollected of.....\$328,169 74 Deducting from this amount.....207,000 00

For the payment of the city bonds and interest, leaves.....\$121,162 74 From which probably \$100,000 may be realized beyond the expenses of collection.

"It was reported to the stockholders at their last annual convention that the loan to this company of \$400,000 by the State of Alabama, which matured March 28, 1856, had been extended by act of the Legislature for two years longer. This act was passed January 12th, 1856, and was a *special* act for the renewal of said loan. On 13th March, 1856, the President addressed a note to His Excellency, the Governor of Alabama, in which he expressed the desire of the company to extend the loan as authorized by the Legislature, and inquired the terms which the Governor would require from the company to obtain such extension.

"In reply, His Excellency stated, that he should require a *literal* compliance with the terms of the two acts on the subject.' An increase of \$200,000 upon the amount of personal security given for the original loan was also demanded. The Board were by this reply made aware for the first time of the existence of a second act applicable to this loan. This was a general law in relation to State loans to railroads, and was enacted February 14, 1856—one month later than the *special* bill extending the loan to this company. By its provisions, the condition of any loan is prescribed to be, that upon default of payment 'the General Assembly may declare the charter forfeited, and that any forfeiture so declared shall be complete and effectual for all purposes without any judicial proceedings for that purpose.' It also provides that before the loan shall be effected a convention of the stockholders shall assent to these terms.

"The Governor refused to extend the loan except these conditions were previously complied with; which compliance was impracticable, not only from the difficulty of procuring a convention of stockholders within the limited period remaining for its accomplishment, but from the fact that such an amendment to the charter from Alabama could not be made without the consent of the other three States under which the company holds charters. Besides, this act being clearly unconstitutional (and once vetoed by the Governor upon that ground), could have no binding force. Having offered, therefore, to fulfil all the requisitions of His Excellency under the special act authorizing the extension of the loan to this company, the Directors could

do nothing more than quietly await the action of the State in the premises.

"On the 2d day of June, 1856, the Trustees advertised the bonds held by the State as security, for sale. The company then filed their bill in Chancery to enjoin the Trustees from selling, and asked also an extension of the loan on complying with the terms of the first mentioned act.

"The Chancellor held that the company must also comply with the last act, and dissolved the injunction. Upon this decision an appeal has been taken to the Supreme Court, where it is now pending, and for hearing in March.

"The ground taken by the company is that the power to declare the charter forfeited is a *judicial*, and not a *legislative* act; that the constitution of Alabama, in express terms, prohibits the Legislature from exercising judicial power; and that no consent or bargain between the State and the company can give such powers; that the last act, being unconstitutional, is void, and that the company therefore have a right to extend the loan without compliance with it; and that, having offered to comply with the first mentioned act, and to extend the loan under it, the act of the Trustees in purposing to sell the bonds is unauthorized and wrong, and should be enjoined.

"The company has continued to pay the quarterly interest on the loan as it has fallen due, during the pendency of these legal proceedings, and the State has thus derived a profit which would have been lost had the bonds been sold and the loan repaid to remain idle in the public Treasury.

"Of the contract for 20,000 tons of rails made in London in 1855, by the former President of the company, and mentioned in last report, 10,000 tons were delivered in the winter and spring of 1856, of which 8,000 tons were payable in Tennessee bonds at par, and 2,000 tons in the company's notes at twelve months, with interest. With this delivery, the parties—availing themselves of an option allowed them in the contract—closed their shipments, and declined furnishing the remainder. One-half of the 8,000 tons payable in Tennessee bonds was shipped to New Orleans, where they are now stored in bonded warehouse, and the remaining 4,000 tons were delivered at Mobile, by direction of the Chief Engineer.

"At a meeting of the Board held April 2d, 1856, the President was appointed as the company's agent, to receive the bonds of the State of Tennessee, to which they would soon become entitled under the internal improvement laws of that State.

"At a subsequent meeting of the Directors, a resolution was adopted declaring that the 4,000 tons of iron in bond at Mobile should be held for the portion of the road in Tennessee.



see—an examination of the subject having satisfied the Board that the use of these rails in Mississippi, as originally contemplated by their shipments to Mobile, would be illegal, and in violation of the acts under which the bonds were to be received.

"The requisite bond having been given, and thirty miles of road prepared for track, the President obtained \$300,000 of the Tennessee bonds on 17th June last; also \$36,000 additional, appropriated for bridge construction. The former sum was applied by him towards the liquidation of the debt for 8,000 tons of rails purchased, as before stated. The company has recently received a further installment of \$100,000 in bonds due upon the preparation of another section of ten miles, which will appear in the accounts of the present year.

"The existence of rumors from various quarters prejudicial to the official character of the Chief Engineer and General Agent, Capt. John Childe, and another of the company's officers, J. W. Wheeler, was probably known to many of the stockholders sometime before any official action by the Board of Directors. These rumors were regarded as unworthy of notice, being looked upon as the mere clamors of individual disaffection, and did not impair or diminish the high confidence which the Board had so long reposed in the faithfulness of their trusted agent. But later charges of a grave character, specific in their nature, and coming from responsible sources, demanded the attention of the Directors.

"At a meeting held on the seventh day of June last the matter was brought up for consideration, whereupon a committee of five Directors was appointed, consisting of Messrs. Roby, Whitfield, Gascoigne, Ledyard and Walker, to make an investigation into the truth of these charges. The committee (excepting Mr. Ledyard) repaired to Okalona in discharge of the duty assigned them, and, after concluding their examination, received the resignation of Mr. Wheeler and returned to Mobile.

"Their report was presented to the Board at a subsequent meeting, held July 9th, 1856, together with the testimony which had been elicited from Mr. Wheeler and others. This testimony was direct and explicit. It disclosed extensive land speculations at Okalona, near Memphis and Charleston Crossings, Nashville Junction, and other points of value, in which Mr. Wheeler (an officer of the company, and himself the witness whose testimony established the most important of these facts) was the active purchaser, and Captain Childe the secret partner.

"After hearing the developments made by the committee, the Board *unanimously* resolved that the Chief Engineer 'be suspended from active service, and the performance of all powers and functions of Chief Engineer and

General Superintendent;' but final action was postponed to give him opportunity 'of explaining or defending himself against the charges set forth by the evidence in the report of the committee.'

"A few days after the arrival of Captain Childe in Mobile a meeting of the Board was called (August 2d) at his request, to hear his defence; which meeting afterward adjourned to August 4th, to give him 'opportunity to amend his answer and reduce it to writing.'

"On the 4th of August the Board was again assembled, and the written communication from the Chief Engineer was presented. In this answer Captain Childe quoted the resolutions of Dec. 18th, 1852, under which authority was given him to establish depots and contract for lands therefor, and justified the system of secrecy which he had adopted. He acknowledged the fact of his purchase of an interest at Okalona, and in the Anderson tract, but claimed that no violation of trust had been committed, the purchase having been made *before* the adoption of the By-Laws forbidding such transactions by officers of the company, and *after* the public location of the Okalona Station.

"The majority of the members present (Messrs. Ledyard and Magee dissenting) did not conceive that the technical grounds upon which Capt. Childe rested for his vindication of the purchases that were the cause of his suspension, relieved those transactions in any degree of their improper character. Having heard his statement, they felt it to be their duty to make the suspension perpetual, which was done, and the President and Executive Committee authorized to appoint a successor to fill the vacancy. A full detail of these proceedings has been published, and will be distributed among the stockholders.

It appears that on the First Division (J. W. Goodwin, Assistant Engineer) the whole number of acres acquired is..... 6,803 4-10  
And at the cost of..... \$10,592 10  
Of which was entered by Mr. J. D. Baldwin and T. S. O'Sullivan, in July and August, 1849, with land warrants, and reported at the annual meeting in 1850..... 5,826 1/2 acres.  
Purchased at land sales, Augusta, by Dr. Borden, under instructions from the Secretary, Sept., 1853..... 446 4-10 "  
Acquired from sundry persons by deed of gift and purchase, by late Chief Engineer..... 244 1/2 "  
Machine shop, whistler and adjoining interest, by Chief Engineer..... 285 8-10 "

Making the total 6,803 4-10 acres, as before named. For 1,940 4-10 acres of this amount no patents have yet issued.

"On Second Division, Wm. H. Childe former Assistant Engineer: Total reported as acquired on this Division by late Chief Engineer, 294 acres, of which was by sundry deeds of gift, 221 1/2 acres; the remainder, 72 1/2 acres, is a half interest in lands adjoining Marion Station, and deed therefor is reported as taken by W. H. Childe, in his own name. The company have agreement of J. Clinton to make title, and it is understood that Clinton has suit now pending to compel Childe to transfer his title to the company. It is re-

cently reported (unofficially) that Childe is now willing to make this title.

"On the Third Division—J. C. Avery, Assistant Engineer—reported as acquired by late Chief Engineer, 21 acres, being Okalona Station, but no evidence of title in possession of company at Mobile. Other stations are believed to have been acquired on this Division, but the Mobile office furnishes no information with regard to them.

"On the Fourth and Fifth Divisions 820 acres are reported by the late Chief Engineer as having been secured by him for the company; but no other evidence of title exists in the Mobile office. His bond for title to Nashville Junction is now held by the company, having been made in August, last.

"On Sixth Division 621 acres are reported; of which a copy of deed for 21 acres only is in the Mobile office.

"It will be seen from this abstract that the evidences of ownership by the company to many of these lands are imperfect and unsatisfactory, no records or deeds having been deposited with the Secretary at Mobile; and the statements of the late Chief Engineer furnishing in these cases the only knowledge received on the subject. It is important, therefore, that the new Board should take early steps to perfect all titles now incomplete, and deposit the necessary deeds and vouchers in the archives of the company.

"The committee who were directed to procure a Chief Engineer and Superintendent to fill the vacancy occasioned by the dismissal of the former incumbent, were enabled to secure the services of L. J. Fleming, Esq., of Wilmington, North Carolina, who resigned a similar post upon the Wilmington & Manchester Railroad to accept the appointment tendered him in this company.

"A careful examination of the road and machinery has been made, by which it appears that from the commencement of operations in 1852 to Jan. 1st, 1857, the depreciation of rails, machinery, cars, &c., has been \$116,250 14. The depreciation has therefore been \$28,458 16 less than the construction freights transported during the same period.

"The system formerly practised on the repair divisions, of boarding the repair hands at a stated price per month, has been changed since 1st February, by the Chief Engineer; and, as estimated upon the number of hands employed, a saving to the company of \$10,000 will be effected the present year.

"A daily mail has been transported over the road since 1st December last, but the Postmaster General refuses to grant a just compensation for the service. The company claimed only to be allowed the same remuneration that other companies were receiving for a similar class of service, but without effect, and have appealed to Congress for relief, which it is believed will be granted.

"During his absence at New York in Octo-



ber last, the President made arrangements for the shipment of 2,000 tons of rail and fastenings for use in Kentucky. One cargo has arrived at Columbus, Ky., and information has been received that track-laying is already commenced. This shipment will complete the road in that State, and also enable the company to continue the track southwardly through Tennessee, with the supply of rails on hand, and no interruption of progress need be apprehended until it reaches Mississippi line.

"Collating from the report of the Chief Engineer the estimates for the different divisions in Mississippi, the means required to carry the work forward from Macon to Tennessee line may be summed up as follows:

Amount to be expended for local work, track-laying, &c., from Macon to Pontotoc line, including Columbus branch.....	\$151,397 00
Which will be needed as the track is laid.	
From Pontotoc north to Tennessee line, exclusive of Nashville branch, local work, &c.....	216,166 00
Total local expenditure.....	\$367,563 00
A statement of uncollected subscriptions January 1st, 1857, reported by J. M. Cunningham, Assistant Treasurer, Mississippi, gives of uncollected private subscription.....	\$308,663 60
Of uncollected county subscriptions.....	123,994 29
Total.....	\$432,657 89
Deducting from the private subscriptions of bad and doubtful.....	148,849 14
	283,808 75

Leaving a deficiency of local means, which must be supplied from other sources, for completing local work, of..... \$83,754 25

"A subscription of \$100,000, made by the county of Pontotoc, is not included in the above statement. After levying and collecting one year's tax upon this subscription, the County Board refused to make any further assessment, and the amount collected, \$9,030, still remains in the hands of the Sheriff. A suit was instituted by the company to enforce payment, which has been appealed, and is not yet decided. A compromise has recently been offered by the county, to direct the Sheriff to pay over the amount collected, \$9,030, upon condition of a release being given as to the remainder. The Directors declined to act upon this proposition, and decided to refer it to the stockholders at their present meeting for consideration.

"A second issue of income bonds, amounting to \$500,000, based upon the extension of the road to Okalona, was authorized by the Board in July last, most of which are still in the possession of the company, unsold.

"The Legislature of Mississippi having at a former session enacted a bill loaning the company \$100,000 from the Chickasaw fund, upon terms with which the Board could not legally comply, has recently increased the amount to \$200,000, upon a deposit of bonds as collateral security, and it is expected that the amount will be realized by the company, in all, the present year.

"The Directors have fully participated in the anxiety which has pervaded the minds of

the stockholders and public for the onward progress of the road. It is well known, however, that no resources existed available for such progress, save those which were stated in the beginning of this report, and which were more than exhausted in carrying the road to Macon. Mr. Moran, the agent appointed the previous year to undertake negotiations, sailed for Europe in June last, where he still remains. He has found no favorable opportunity since his arrival for placing the sterling bonds upon the market. High rates and an active demand for money have prevailed throughout the year, and effectually precluded the introduction of any new railway securities. Recent advices do not give encouragement of early success unless a material decline in the value of money abroad shall soon take place, and the Board, determined not to await the tide of events, have adopted the plan of obtaining individual guarantees for the cost of sufficient iron to lay the track to Columbus and Tennessee line, and thus make the grand chain complete. Signatures have been obtained from citizens of Mobile to the amount of \$403,500, which it is believed will ensure the success of the effort; and an agent will soon proceed to New York, and, if advisable, to Europe, to make the necessary negotiations.

"Should a purchase of rails and fastenings be made upon this guarantee, there would still be required to be raised at home for duties, freights, insurance, warehouse at Mobile, and additional equipment for increased business within the year, \$600,000.

To meet this expenditure the company have,	
uncollected city taxes, say.....	\$100,000
Mississippi State loan.....	200,000
Income bonds (after deducting \$200,000 for Mississippi loan, estimated at 80).....	205,200
Net earnings of 220 miles of road for 12 months, estimated.....	340,000
Less interest on debt.....	210,000
	130,000

Total..... \$635,000  
 "This amount, if at once available, would enable the company to carry the work through to Tennessee without embarrassment, provided an amount equal to the existing indebtedness could be carried forward another year. The cash earnings of 1856 upon 180 miles of road in operation have exceeded the entire interest account, and prove conclusively the ability of the company to maintain its credit and meet its interest hereafter. As appears by Table No. 15 in the Chief Engineer's Report, the earnings for the past year have been 6 per cent. upon the cost as far as completed—and the interesting comparison presented in that table between the Mobile & Ohio, Illinois Central, and various Southern roads, cannot fail to impress every stockholder with a clearer sense of the value of this work as a stock investment.

"With the completion of the road to Okalona in season for the next crop, and the Northern Division in operation from Columbus, Ky., to Jackson, Tenn., the earnings will

be augmented to a degree that will ere long relieve the company from its perplexities; and it will need only the support of the stockholders in a faithful and prudent administration of its affairs, to give to this work the high rank among railroad enterprises to which its merits legitimately entitle it.

All of which is respectfully submitted.

FRANCIS B. CLARK,  
C. GASCOIGNE,

Executive Committee.

"I approve the Report as submitted, except so far as relates to the opinions of the majority in reference to the dismissal of Captain Childe, from which I withhold my concurrence.  
W. J. LEDYARD.

"Amount of indebtedness of Mobile & Ohio Railroad Company, outstanding and unpaid Dec. 31st, 1856, and on what account; as reported at the Mobile office—except income bonds:

FLOATING.	
Unpaid transportation expenses and sundry local bills.....	\$ 40,981 60
Unpaid balances due contractors for local work.....	40,325 53
Unpaid sundry accounts and bills payable, bank loans on bonds, &c.....	358,151 01
Machinery for Whistler.....	1,480 70
Due on car materials, &c., purchased.....	21,439 02
Due on locomotives, &c., (part for Tennessee).....	45,508 17
Total floating debt.....	\$517,386 03
IRON.	
Due for rails, &c., to Thompson, as reported Dec. 31, 1855.....	432,918 31
Due for rails, &c., to Ebbervale & Co., as reported Dec. 31, 1855.....	232,058 18
Due for rails, &c., to Ebbervale & Co., purchased 1855, received 1856.....	42,460 94
Due for rails, &c., to W. Forman & Co., purchased 1855, received 1856.....	49,586 57
Due for rails, &c., to Bay State Co., balance.....	24,000 00
Due for fishing bars, spikes, &c.....	61,150 88
Due for fishing bars, spikes, &c., for Tenn., (payment in Tenn. bonds).....	81,398 85
City tax bonds of 1857, due April 1st, 1857, unpaid.....	199,000 00
Alabama State loan.....	400,000 00
Total.....	\$2,066,959 76
From which should be deducted:	
City tax of 1856, say.....	\$250,000 00
Less 6 months' int. on \$200,000.....	8,000 00
	242,000 00

Bal. indebtedness above funds set apart... \$1,824,659 76

ACCIDENTS—DEMOLITION OF PROPERTY—PARLIAMENTARY RETURN.—During the half year ended the 31st December, 1856, there were 37 accidents to passenger trains, and 6 to goods and mineral trains in England, Wales, Scotland and Ireland, making a total of 43; 7 passengers were killed and 224 injured, and 16 servants of the companies killed and 33 injured; making a total of 23 persons killed and 257 injured. Of the 43 accidents 24 arose from collisions of all kinds, 3 from trains running into sidings, or off their own lines, 10 from trains getting off the rails, 4 from breakage of axles and couplings, 1 from the bursting of a boiler, and 1 from a train running into a station at full speed. The total number of accidents to servants of companies, contractors and laborers, amounted, for the half year, to 75 killed and 51 injured; 19 were killed and 36 injured from causes beyond their control, and 56 killed and 15 injured from want of caution, or from misconduct; 4 engine-drivers were killed and 11 hurt, 14 firemen killed and 7 hurt, 6 guards killed and 12 hurt, 13 porters killed and 4 hurt, 2 policemen killed, 4 gatemen and signalmen killed and 1 hurt, 3 switchmen killed, 6 platelayers killed and 5 hurt, 12 laborers killed and 5 hurt, and 11 miscellaneous persons killed and 6 hurt. These accidents occurred on all lines open for traffic in the United Kingdom.—*Herapath's Railway Times.*



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds	Name of Company.	Quot' of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hmp'sr	.....	173	5,000,000.00	.....	209,475.46	170,246.92	none.
498,800	7			1862-3	2d	.....	Androskog'n & Kennebec	.....	5455	1,400,000.00	.....	.....	.....	4 pr. ct. 6m
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange..	.....	86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	8 pr. ct.
52,646	6			now	"	.....	B'ng'r, Old T. & Milford..	.....	12.5	135,000.00	52,646.26	39,104.40	2,671.61	15,000 in '53
500,000	7		N. Y.	1860	"	.....	Boston & Worcester..	.....	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,063.03	180000 4.6m
500,000	7			1866	1st mortgage.	.....	Buffalo & State Line..	.....	.....	1,300,000.00	.....	.....	.....	5 pr. ct. 6m.
300,000	7			1857-9-62	Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
200,000	7			1864	Domestic.	.....	"	.....	.....	.....	.....	.....	.....	.....
577,187	6			1872	4th mortgage.	.....	Central Ohio.	.....	43	1,872,800.00	1,001,087.00	168,200.00	77,700.00	10 per ct.
192,200	7			1874	1st mortgage.	.....	Champl'n & St. Lawrence	.....	110	1,730,000.00	350,000.00	291,219.86	47 per ct. L	\$72,300
380,000	7				2d	.....	Ch'r'l'te & South Carolina.	.....	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,440,000	6-7-8		N. Y.	1864-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	.....	.....	.....	.....	.....	.....	.....
1,300,000	8			1868-9	2d	.....	"	.....	.....	.....	.....	.....	.....	.....
374,000				1868-76	Convertible.	.....	"	.....	.....	.....	.....	.....	.....	.....
1,500,000					1st mortgage.	.....	Chicago, Fulton & Iowa..	.....	13 1/2	1,761,149.16	2,241,500.00	221,491.96	.....	.....
532,000					2d	.....	Cin. Will'ng'n & Zanes'ville	.....	.....	.....	.....	.....	.....	.....
104,000					3d	.....	"	.....	.....	.....	.....	.....	.....	.....
305,500					Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
540,000	6			1873	1st mortgage.	.....	Cleveland & Mahoning..	.....	55	1,500,000.00	.....	.....	.....	.....
400,000	7			1864	2d	.....	"	.....	.....	.....	.....	.....	.....	.....
000,000	6			1873		.....	Cumberland Valley.....	.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24
500,000	6			1873		.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00	.....	.....	.....
				1857-8-9	1st mortgage.	.....	Eastern Railroad.....	.....	93 6-10	3,345,900.00	.....	665,578.79	288,087.84	\$234,133
350,000	7				1st mortgage.	.....	East Ten. & Virginia...	.....	130	625,450.00	.....	30,897.30	19,692.30	.....
740,000	10			1869	1st	.....	Essex Railroad.....	.....	20	700,000.00	.....	243,970.42	136,061.90	\$133,221.45
88,000	7			1861	2d	.....	Evansville & Crawf'd'ville	.....	109	2,228,657.50	.....	681,162.52	213,837.81	3 per cent.
400,000	7			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,540,000.00	.....	.....	.....	.....
200,000	10					.....	Fox River Valley.....	.....	33	800,000.00	.....	50,321.33	14,822.45	\$166,240.00
						.....	Fair Haven Branch.....	.....	15	300,000.00	.....	1,068,262.51	357,689.42	\$166,240.00
100,000	6				1st mortgage.	.....	Georgia R.R. & Banking Co.	.....	233	4,156,000.00	.....	27,576.69	14,207.07	.....
100,000	6				2d	.....	G't Falls & Conway R.R.	.....	90	.....	.....	.....	.....	.....
300,000	6				1st	.....	G't West'n R.R. of Can...	.....	281 1/2	4,191,550.00	.....	2,068,836.00	.....	8 pr. ct.
4,000,000	6 1-9			1858	1st	.....	Housatonic Railroad.....	.....	74	2,060,000.00	.....	339,196.50	176,529.92	.....
2,000,000	7			1860	2d	.....	Hudson River.....	.....	144	4,000,000.00	.....	1,924,382.44	718,037.40	.....
1,812,000	7			1875	3d mortgage.	.....	"	.....	144	4,000,000.00	.....	.....	.....	.....
2,885,000	7			1875	1st	.....	Illinois Central R.R.....	.....	129 1/2	17,000,000.00	.....	1,532,117.00	562,221.00	7 pr. ct.
4,115,000	7			1860	2d	.....	"	.....	704	17,000,000.00	.....	.....	.....	3 pr. ct.
3,000,000	7				1st mortgage.	.....	Indiana Central.....	.....	72 1/2	.....	.....	354,871.00	.....	.....
600,000	7				2d	.....	"	.....	.....	.....	.....	.....	.....	.....
700,000	7	Nov. 1,		1862	1st	.....	Iron R.R.....	.....	13	123,700.00	.....	.....	.....	.....
50,000	7	Jan. & July 1			1st mortgage.	.....	Kentucky Cen. 2d Div...	.....	.....	719,500.00	.....	.....	.....	.....
700,000	7					.....	Knoxville & Kentucky..	.....	.....	.....	.....	.....	.....	.....
						.....	Laurens (S. C.) R.R.....	.....	32	166,060.00	.....	23,233.59	14,233.59	.....
218,000	7				1st	.....	Louisville & Nashville...	.....	184	.....	.....	50,324.71	14,149.13	8,000
1,000,000	7			1866	2d	.....	Lowell & Lawrence...	.....	12 35	300,000.00	.....	587,236.37	162,977.50	10 pr. ct.
1,000,000	7			1875	2d	.....	Mad River & Lake Erie...	.....	.....	2,697,090.00	.....	.....	.....	.....
2,000,000	6				1st	.....	"	.....	.....	2,697,090.00	.....	.....	.....	.....
2,500,000	7			1868	1st	.....	Manchester & Lawrence.	.....	26	1,000,000.00	.....	.....	.....	\$24,000
2,000,000	7			1874	2d	.....	Marietta & Cincinnati...	.....	.....	.....	.....	.....	.....	.....
60,000	7 and 8			1867	1st	.....	Mexican Gulf R.R.....	.....	27	.....	.....	.....	.....	.....
420,000	8				1st mortgage.	.....	Milwaukee & Horicon...	.....	30	.....	.....	.....	.....	.....
320,000	8			1881	1st	.....	Mineral Point R.R.....	.....	32	.....	.....	.....	.....	.....
320,000	8			1868	2d	.....	"	.....	32	.....	.....	.....	.....	.....
6,000,000	6			1884	1st	.....	Mobile & Ohio.....	.....	497	10,000,000.00	.....	253,498.96	162,802.24	7 pr. ct.
500,000	7			1869	1st mortgage.	.....	Nashua & Lowell R.R.....	.....	15	600,000.00	.....	193,752.42	55,501.74	2 pr. ct. 6m
2,350,000	6	May & Nov.	N. York			.....	New Haven & Northm'tn	.....	55	922,500.00	.....	7,707.348	3,609.481	3 pr. ct. 6m
8,892,600	7	June & Dec.	N. York			.....	New York Central.....	.....	555	23,067,400	14,763,897	.....	.....	.....
3,000,000	7			1873	1st mortgage.	.....	N. Y. & Harlem R.R....	.....	133	5,717,100.00	.....	1,040,593.26	64,678.71	\$37,692.30
936,000	7			1864	2d	.....	"	.....	.....	.....	.....	.....	.....	.....
411,700	6			1863	1st	.....	N. Y., Prov. & Boston...	.....	50	1,58,000.00	.....	245,713.00	51,544.40	.....
500,000	7				1st	.....	N. Lon. William'ntu & Pal.	.....	66	1,700,000.00	.....	120,571.50	.....	.....
300,000	6				2d	.....	"	.....	.....	.....	.....	.....	.....	\$25,000
						.....	Pontchartrain R.R.....	.....	5	500,000.00	.....	116,795.00	366,118.52	7 pr. ct.
1,500,000	6			1873	1st mortgage.	.....	N. O., Opelousa & Gr. t. West.	.....	62 1/2	6,00,000.00	.....	1,007,666.48	.....	.....
1,000,000	6			1873	2d	.....	N. Y. & New Haven...	.....	103 1/2	3,000,000.00	.....	.....	.....	.....
2,000,000	7			1885	3d	.....	North Western Va. R.R.	.....	.....	.....	.....	.....	.....	.....
1,500,000	7			1859	1st mortgage.	.....	"	.....	.....	.....	.....	.....	.....	.....
3,000,000	5					.....	Northern (N. Y.) R.R....	.....	118	2,000,000.00	.....	600,000.00	88,458.56	2 1/2 pr. ct.
419,300	7					.....	North Missouri R.R.....	.....	19 1/2	.....	.....	25,176.74	304,236.33	.....
221,800	6			1877	1st mortgage.	.....	Norwich & Worcester RR	.....	60	2,111,500.00	.....	.....	.....	.....
				1860	"	.....	"	.....	.....	.....	.....	.....	.....	.....
400,000	6			1866	1st mortgage.	.....	Ogd'nsh'g, Clay'tn & Rome	.....	94	.....	.....	289,690.10	137,875.93	3 pr. ct.
1,200,000	7			1875	2d mortgage.	.....	Ontario, Simcoe & Huron	.....	83 3/4	2,937,500.00	.....	276,539.02	.....	.....
300,000	6			1868	1st mortgage.	.....	Orange & Alexandria R.R	.....	.....	.....	.....	.....	.....	.....
300,000	8			1873	1st	.....	Peoria & Bureau Val. R.R.	.....	47	1,500,000.00	.....	.....	.....	6 pr. ct.
750,000	7			1861	1st mortgage.	.....	Philadelphia & Trenton..	.....	28 1-5	1,000,000.00	.....	.....	.....	.....
800,000	6			1864 to 1874	1st	.....	Portsmouth & Concord..	.....	47	.....	.....	.....	.....	.....
1,260,000	6			20 years.	1st mortgage.	.....	Potsdam & Watertown...	.....	76	2,000,000.00	.....	68,325.42	.....	.....
						.....	Rutland & Washington...	.....	62 1/2	950,000.00	.....	.....	.....	.....
						.....	St. Louis & Iron Moun. R.R	.....	86	6,000,000.00	.....	.....	.....	.....
						.....	Salem & St. Louis R.R...	.....	168 3/4	400,000.00	.....	.....	.....	.....
						.....	Snd'sky, Mans'fd & New'k	.....	116	.....	.....	19,050.64	.....	.....
						.....	Sullivan Railroad.....	.....	26	500,000.00	.....	75,246.06	17,378.08	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Tennessee & Alabama...	.....	145	.....	.....	39,586.44	.....	11m. 12 pr. ct
						.....	Terre Haute & Richmond	.....	73	1,294,450.00	.....	.....	.....	.....
						.....	Toledo, Wabash & Western	.....	242	.....	.....	.....	.....	.....
						.....	Troy & Boston.....	.....	.....	1,000,000.00	.....	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Vicksburg & Jackson....	.....	46	.....	.....	.....	165,276.61	.....
						.....	Virginia & Tennessee...	.....	215	3,000,000.00	.....	322,048.60	.....	2 pr. ct.
						.....	Westchester (Pa.) R.R...	.....	31	165,000.00	.....	.....	.....	.....
						.....	Wilmington & Manchester	.....	171	.....	.....	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Winchester & Potomac...	.....	32	.....	.....	.....	.....	.....
						.....	Worcester & Nashua....	.....	45 69	.....	.....	.....	.....	.....



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

February 20, 1857.

Belvidere, Del. guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858, ..	"	—
Cin. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	"	71
Erie, 3d Mortgage, 1883, ..	"	86
" Sinking Fund, ..	"	87
" conv. 1862, ..	"	80
Grand Trunk (Canada) Debenture, ..	"	83
Great Western " conv., ..	"	123
" " non-conv., ..	"	110
Illinois Central, 1st Mort., 7½, ..	"	92
" " with option 70 per cent. shares till Jan. 1858, ..	"	110
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	"	84
Little Miami 1st Mort. not conv. 6's, ..	"	—
Marietta and Cincinnati, 1st Mort., ..	"	—
Michigan Central, conv., 8's, 1860, ..	"	94
do do do 1869, ..	"	92½
N. York Central, No Mort. Not conv., 6's 80	"	81
" " conv., 7's, ..	"	95
Ohio and Mississippi, 1st Mort., ..	"	—
Ohio and Pennsylvania, Income 1872, ..	"	70
Panama, No mort. conv. 1866, ..	"	—
Pennsylvania, 1st Mort., conv., ..	"	89
" " Sterling, 2d Mort., ..	"	93
Steuenville and Ind., 2d Mort., ..	"	—

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent.

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending April 1, 1857.

## BONDS.

\$2,000 Cincinnati, Ham. & Dayton R. R. Co. 7 per cent. 1st Mort. Bonds, ..	87½
5,000 Indianapolis & Cincinnati R. R. 7 per cent. 2d Mortgage Bonds, ..	80 and int.
3,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds, ..	67
4,000 Do. do. do. do. 66½	
2,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	82
1,000 Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds due '61, 30ds. 90	
3,000 Cincinnati 6 per cent. Bonds, ..	89
1,500 Cov. & Lex. R. R. Co. 6 per cent. Income Bonds, ..	45
1,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 2d mort. Bonds, ..	82½
2,000 Cin., Wil. & Zanesville R. R. Co. 7 per cent. 2d mort. Bonds, ..	30
1,000 Covington & Lex. R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	70
980 Ohio & Mississippi R. R. Co. Scrip. 33½	
650 Little Miami R. R. Co. Dividend Scrip., ..	80

## STOCKS.

936 Shares Southern Pacific, ..	\$2 00 for \$3 paid.
300 " do do ..	2 25 for 3
200 " do do ..	3 30 for 5
300 " Ohio and Mississippi, ..	11
300 " do do 30ds., ..	11½
100 " Little Miami, ..	92
20 " do do ..	92½
35 " Cin., Ham. & Dayton, ..	71
40 " Indiana Central, ..	59
100 " Dayton & Western, ..	20
22 " Columbus & Xenia, ..	92
50 " Indiana and Cin., ..	65
163 " Marietta & Cincinnati, 30ds. 19 and int.	
15 " Eaton & Hamilton, ..	18
36 " Cin. & Chicago, ..	3
5 " Ohio Life Ins. & Trust Co. Bank, ..	07

## MONETARY AND COMMERCIAL.

We have had another week of limited supply of currency, and consequent stringency in the market for money. There has not, however, till the last day or two, been as active demand as previously reported. With the beginning of the month, however, the demand increases. The notes given for the January settlements are generally coming due, and this circumstance renders the beginning of April one of the closest times in the year. When the 4th is over we look for growing ease in money.

Eastern exchange is still maintained at ¾ to 1 per cent. premium. The high rate obtained thus causes Eastern currency to be rapidly returned, and deprives us of

the advantage of it as a circulating medium. New Orleans is flat, at ½ dis. to ¼ prem.

In stocks we notice a favorable state of the market. Prices are well sustained, and transactions of respectable character. We have to notice a decline in the auction quotations of Southern Pacific Railroad stock, and a consequent slur cast upon the stock by a leading daily journal. As the money editor of this journal knows a little of the real character of this stock as any other man who declines to take the trouble to read its reports, and believes that railroads, as a whole, are badly managed and fraudulent concerns, the public will know what weight to place upon the ill-considered remarks he may make. We have been asked why we did not defend this company in a more formal manner. Our answer is simply this: the affairs of this company, for all we know, may be well managed; the directors and officers, however, are located mainly in New York, while the stock held in Cincinnati is wholly unrepresented in the directory. This we regard as an outrage, and shall so regard it till at least one of the directors is taken from this city. It was Cincinnati that first placed this project upon a safe footing, and secured for it a respectful hearing from the world. This, and this alone, has accomplished, in proper time, the work necessary to secure the charter to the company; and we say that, by every rule of justice and courtesy, Cincinnati is entitled to a voice in the directory. When her just demands are granted, we shall be satisfied, and not till then.

Advice from New York show a more satisfactory state of things. Stocks firmer, and money somewhat easier. Mr. E. T. Satterthwaite, of London, England, in his circular, says:

Since our advices of the 13th inst., per Niagara, we have had a slightly improved tone in the money market, without any concession in the rates for money, and there seems a more ample supply.

Consols close steadily at 93¼ to ¼ for money, and 93¼ to 4 for account.

In American Securities business has been transacted to a moderate amount, with very little change from our previous rates. Illinois Central shares have advanced 2 per cent. in consequence of the advance established in New York, but are not in very active request. Free-lands are scarce, and have brought 109 ex-coupon. Constructions are more freely offered at 91½, and have been done to-day at 91 and 91½. We note moderate transactions in Erie 1883, 1862 and 1871 Bonds, and in Michigan Central and New York Central Convertible Bonds.

Hewson & Holmes, in their circular, say:

The firmness in the stock market noticed in our last report has continued through the past week, prices of dividend paying securities continue to advance at about the rate of the expected dividend or the accrued interest on the respective securities. This advance, which has been progressing in about the same ratio for several weeks does not seem to be influenced or affected by the condition of the money market, either at home or abroad, and is a high endorsement of the estimate in which the capitalist holds these securities.

Little Miami shares are in active demand at 92, with one sale at ½ per cent. above that rate. Hamilton & Dayton shares are saleable at 71. This price, which is higher than for several months, does not seem to bring any of it into market. Indianapolis & Cincinnati shares have been very quiet, with sale of 50 shares at 65, this stock is held firmly at this price.

In the fancies, we note sales of Southern Pacific at from 66 to 70 per cent. of the amount paid: at our public sale on Saturday 936 shares of the \$3. stock of this company sold at \$2. A large amount of this stock has been forced off in this market in the last month at prices which are considered very low by those who are familiar with the prospects and advantages of this Co.; the market is now pretty well clear of heavy lots, and prices are looking up. Ohio &

Miss. shares are more quiet with sales at 11 to 11½, the latter 30 days.

In bonds we report sales of Hamilton & Dayton 1st. mortgage 7s at 87½ Indianapolis & Cin. 2d. mortgage at 80 and int. Covington & Lexington 2d. mortgages at 66½ to 67. Little Miami 6 per cent. 82 and Cincinnati 6s at 89 and int.

We have no change to report in money matters. Currency is less abundant in the past week. New York Exchange ¾ to 1 premium. New Orleans ½ discount to ¼ premium. Business generally is very active in all branches.

## NEW YORK STOCK SALES, March, 30, 1857.

\$500 Virginia 6's, ..	92
6,000 Missouri State 6's, ..	84
1,000 N. Y. Central 7's, ..	102
1,000 Erie R. R. 2d Mortgage Bonds, ..	95½
4,000 Erie Railroad 3d mort. Bonds, 1883, ..	92
2,000 Hudson Riv. R. R. 1st Mort. Bonds, ..	97
1,000 Ill. Cent. R. R. Bonds, ..	102
100 Shares N. Y. Central R. R., ..	89
160 " Mil. & Miss., ..	73½
7 " Galena & Chicago, ..	103
30 " Chicago & Rock Island R. R., ..	106½
500 " Erie R. R. stock, ..	53½
507 " Harlem, ..	13½
473 " Reading, ..	79½
85 " Mich. Cent., ..	95½
50 " Mich. So. & No. Ind., ..	75
229 " Illinois Central R. R., ..	133
100 " Cleveland & Pittsburgh, ..	55
200 " Cleveland & Toledo, ..	73½
200 " Milwaukee & La Crosse, ..	77½

SOUTHERN PACIFIC R. R.—It is stated that arrangements have been made between this Company and Messrs. James Robb & Co. of New Orleans, by which these gentlemen will become interested in this Company.

LOSSES ON THE LAKES.—The total loss by steam during the year 1856, on the Lakes, was \$3,038,874. The aggregate losses for the past seven years have been as follows:

1850, ..	\$ 544,440
1851, ..	750,515
1852, ..	991,015
1853, ..	854,350
1854, ..	2,187,825
1855, ..	2,797,839
1856, ..	3,038,874

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
ap2 Louisville and Frankfort Railroad.

Thorough Bred Stock  
FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

## SHORT HORN BULL,

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

T. WRIGHTSON.



REPORT OF THE PRESIDENT OF THE T. H. A. & ST. L. RR.—We are under obligations to CHARLES CRUFT, President of the "Terre-Haute, Alton and St. Louis Railroad Company," for his very able report. We have examined it with much interest, and are pleased to find the condition of this road so favorable. Mr. CRUFT has displayed much financial ability in the discharge of the arduous duties incumbent on him as President, and in his report he presents the affairs of the road, in a clear and business-like manner.

The following is the gross earnings of the entire line, from March 1st, 1856, to Jan. 1st, 1857.

March.....	\$39,956 23
April.....	44,773 78
May.....	47,469 21
June.....	47,741 17
July.....	52,178 88
August.....	73,867 73
September.....	91,400 79
October.....	110,807 25
November.....	82,605 15
December.....	72,060 08

Less operating expenses..... \$602,860 40  
330,520 30

Balance net earnings..... \$332,340 19

The present equipment of the road consists of 29 locomotives, 30 passenger cars, 8 mail and baggage cars and 315 freight cars. The number of passengers transported over the road from the 1st of March to the 1st of Jan., is 132,989. The monthly statements show there is a rapid and gradual increase each month, beginning with 2,807 passengers for February, and ending with 14,157 for the month of December.

The road has, under many disadvantages which cannot again exist, actually made in net profits a sum equal to the payment of the interest on its funded debt for that period, with a surplus of \$82,340, which is equivalent to about *three per cent.* upon its consolidated capital stock. This is certainly doing exceedingly well, and bids fair to make this road a good investment to the stockholders. We cannot, at this time, give further extracts from this able report, but in every particular it is a clear and in our judgement, an impartial exposure of the condition of the Terre-Haute, Alton & St. Louis Railroad.

#### CINCINNATI AND MACKINAW R. R.

Since our notice of the favorable position in which the land grants of Michigan have put the northern part of this important project, our attention has been called to the present position of the link that must eventually join Cincinnati with the Michigan roads, leading to the straits. Each of the projected roads will, in due time, as we receive the necessary information, claim our special notice. In the meanwhile we republish with pleasure an article which we find in the Fort Wayne Times of March 26th. The object of the writer is to show that it is the true interest of both lines to concentrate at Fort Wayne, as one of the great Railroad centres from radial lines diverging in every direction. The writer in the Times says:

"Railroads in Michigan, to run North and South, have received large grants of land from government, which, are variously estimated to be worth, from three-and-a-half to eight millions of dollars each. This warrants the conclusion that both will be built. One of these occupies a line from Mackinaw by

Traverse Bay, Grand Rapids, Kalamazoo, Sturgis, and ultimately to Fort Wayne, lying as it appears, mostly on the west side of the State.

The other is to run from Mackinaw by way of Saginaw River, near the Bay of that name to Lansing, (capitol of the State,) Jonesville, Hillsdale, and the State Line of Ohio, at a point, a little east of the Indiana line, occupying the eastern and middle part of the State. They both penetrate the great lumber region, the supply of Pine from which, would seem almost inexhaustible. The Western line has on it the flourishing town of Grand Rapids, which is represented as having a population of from ten to twelve thousand. The plaster found at this place is used freely in that State, and is even hauled on wagons to the northern counties of our own State, and used profitably.

These roads must have outlets to Cincinnati. As citizens of Fort Wayne, we are interested in securing, if possible, their location to this point, where they may connect with the road now building from here to that city, and with other roads east and west. But other schemes are on foot, which if successful, will deprive us of the advantages of these connections, and of which, it is well the public should be advised. One is to take the Lansing road from Hillsdale, by way of Defiance to Lima, Ohio, and thence by Sidney, Troy, and Dayton to Cincinnati. The other is to run from Hillsdale, through Williams, Paulding, Vanwert, Mercer and Darke counties, to Greenville, Ohio; thence by Greenville road to Junction with the Indiana Central, thence by the Twin Creek route to Carlisle on the C. H. & D. road, and by that road to the city. There is some danger that one or the other of these routes may be adopted by the Lansing Company.

The distances on these routes to Cincinnati, may be stated as follows, counting the running roads, and roads in progress of construction on each line, at their actual measurement, and the remainder estimated from the best data at hand, viz:

From	Miles.
Hillsdale to Ohio State Line.....	13½
Ohio and Mich. State Line to Fort Wayne, via Auburn and Eel River Railroad.....	45
Fort Wayne to Cincinnati by C. & F. W. Railroad....	149

Total.....207½

Hillsdale to Ohio State Line.....	13½
Ohio and Michigan State Line to Greenville, through Williams, Paulding and Vanwert Counties.....	113
Greenville to Cincinnati, by Greenville road to Junction of Indiana Central, thence by Twin Creek to Carlisle and C. H. & D. Railroad to the city.....	85

Total.....211½

Hillsdale to Lima, Ohio.....	85
Lima to Cincinnati, by Troy and Dayton, and C. H. & D. Railroads.....	150

Total.....235

The difference in distance in these routes it is seen is trifling. The Fort Wayne being the shortest of three; but distance is not the principal consideration which should give this route the preference.

The Lima route requires 85 miles of an entirely new road, to be built through a thinly settled country, and a part of the work remains to be done between Lima and Troy.

The Paulding and Vanwert route requires 113 miles of new road to be made, through a sparsely settled country, and 20 miles more to complete in part between the Greenville road and Carlisle.

While the Fort Wayne route is located a good portion of the way through a well settled country. The counties are DeKalb, Al-

len, Wells, Jay, Randolph, and Wayne, in Indiana, and Preble and Butler, in Ohio.—The important towns of Fort Wayne, and Richmond, are on this route, having respectively, ten, and eight thousand inhabitants. The roads on it are completed from Cincinnati to Richmond, and from Richmond to Fort Wayne, the work, in preparing for the Iron, is half finished, and the whole may be ready for use before the Michigan roads can be completed. The first ten miles north of Fort Wayne will be built by the Grand Rapids company with some help from our citizens.—The Eel River road to the Junction of the Air line road from Toledo to Goshen, is half graded, leaving about fifteen miles only to build to reach Hillsdale. It is seen then that the Lansing Company need not build farther south than to intersect the Eel river road at the crossing of the Toledo and Goshen Air Line road, as the remainder of the line by way of Fort Wayne, will be prepared by other companies, and further, that this route runs through a much better country for business than either of the others, and that it secures a connection at Fort Wayne with a greater number of roads than are centering in any other part of the State, except one.—The true interests, therefore, of this company, it would seem, will be, to look towards this place as an outlet to Cincinnati.

#### BALTIMORE & OHIO R. R.

The matter of the extra dividend resolved upon by the directors of this road Dec. 17th is still attracting a great share of the attention of the board. The following resolutions were passed at a special meeting of the board. The vote was a party vote and was carried by the City and State directors against the stockholders, directors.

Whereas the President and Directors of this Company did, on the 17th day of December, pass a resolution declaring a dividend of thirty per cent, on three million of dollars, alleged to be net earnings of the Company heretofore used in the construction of the road, payable in certificates of indebtedness bearing interest.

And whereas, upon a bill of complaint filed by the Mayor and City Council of Baltimore, on the 10th of January, an injunction was awarded by the Circuit Court for Baltimore City, forbidding this Company to deliver the said certificates, upon the ground that the said resolution was unlawful, and not warranted by the charter of this Company.

And whereas, a paper purporting to be the answer of this Company to the said bill, was, on the 21st of January, filed in the said Circuit Court under the corporate seal of this Company, which bill was afterward, on the 2d of February, verified by the affidavit of the President; and whereas, the said paper was filed without having been submitted to this Board, or the purport thereof communicated to any of the Directors on the part of the city of Baltimore, or State of Maryland, constituting, together, a majority of this Board.

And whereas, it is equally the right and duty of this Board to insist, that in a transaction of so much importance, this Company should only be bound by the opinion of a majority of this Board, expressed by their votes and proceedings in reference thereto;

And whereas, the said paper, if allowed to stand, as the authorized answer of this Company to the said bill of the city of Baltimore, may be used and relied upon to the prejudice of this Company in other suits or controversies in relation to said dividend. Therefore,

Resolved, That the paper purporting to be



the answer of this Company to the bill of the Mayor and City Council of Baltimore, and filed in the Circuit Court for said city, never having received the assent of this Board, cannot, in any just and legal sense, be considered the answer of this corporation.

*Resolved*, That the solicitors, representing this Company in the said suit, be and they are hereby respectfully requested and instructed to ask leave of the Court to withdraw the said answer, in order that an amended answer, sanctioned by a majority of the whole Board may be thereafter filed—and for that purpose to dismiss the pending motion to show cause why the injunction shall not be dissolved.

*Resolved*, That the Secretary be and he is hereby instructed to transmit the foregoing preamble and resolutions to Messrs. Johnson and Latrobe, the solicitors of the Company, and that the said solicitors are hereby requested to file the same, by the leave of the Court, in the proceedings in the said cause.

And, inasmuch as it is the desire of this company that its right and power, under its charter, to declare the said extra dividend, shall be fairly and fully tried, after the filing of the said amended answer, the solicitors of this Company are respectfully requested upon the final hearing and argument of the cause now pending before his Honor Judge Krebs, to interpose no technical objections or defences that may either delay the determination of the cause, or prevent it from being decided upon its merits.

#### MANUFACTURE OF COPPER, AND OBTAINING GOLD AND SILVER FROM CUPREOUS ORES.

Henry Hussey Vivian, B. G. Hermann and William Morgan, of the Haford Works, Swansea, Wales, have just specified their improvements in the manufacture of copper, and in obtaining gold and silver from the ores employed in such manufacture. The invention has chiefly reference to the treatment of metallic copper bottoms, derived from the well-known smelting process of selecting or "regule" making up, to the production of which metallic bottoms they introduce no alteration in the smelting of copper ores, whether they be auriferous, argentiferous, or so allied with impurities, as to produce bottoms in the selecting process of greatly depreciated value when reduced to a marketable state. The invention is also applicable to the auriferous, argentiferous, or impure copper of commerce. They describe the method adopted for dealing with such metallic bottoms or copper which, whether derived from the tapping beds or purchased, is in the state of pigs or blocks. They melt these pigs or blocks, and tap the melted metal into cold water, of which a constant supply must be kept up, so as to cause the metal to assume the form known as "feathered shot;" and to facilitate the after process of calcination, all large pieces should be picked out and re-melted. The metal is next calcined in an ordinary calciner until the whole, or practically the whole, is converted into an oxide—that is to say, until it is susceptible of being pounded to dust in a mortar. An ordinary copper-work's calciner is capable of bringing three tons of copper into this state in 72 hours: one ton is charged and one ton is withdrawn each 24 hours, introducing it at the end of the calciner most remote from the fire, and advancing it each 24 hours toward the end of the bridge; in the meantime, the granulated copper must be frequently stirred, so as to expose fresh surfaces, and a bright red heat must be kept up. The above is the process of oxidation considered the best, but the metal may be otherwise oxidised, if it be preferred. Having converted the bottom or metallic copper into an oxide, that oxide is mixed with a sulphurous material, and the mixture is melted, so as to reduce it into a regulus of copper. They have mixed 25 cwt. of

sulphurous copper ore (containing say 30 per cent. of sulphur) with 16 cwt. of oxide, and have converted the oxide of copper into a regulus (of about 40 per cent.) The oxide has also been mixed with raw ore, furnace metal, and silicious matter, and produced a like result. A small metallic bottom is usually produced in this process, which will be found to be rich in gold. It is quite possible to mix a smaller proportion of sulphurous metal, and thus to produce less regulus and more metallic copper or bottom; but practice has shown it to be better to reduce nearly the whole oxide of copper to regulus. The regulus is then advanced by calcining and smelting, or by roasting up to "white metal" of about 70 per cent., and this white metal submitted to the selecting process, so as to produce "light regulus" and metallic bottoms.—From the ordinary furnace charge of two tons, 30 cwt. of regulus and 5 to 6 cwt. of bottom have been obtained with a satisfactory result. These bottoms will be found to contain nearly all gold contained in the copper or bottom operated upon. It any sensible amount of gold remains in the regulus, a second selecting will remove it, and concentrate it in the bottoms. It has been found that lead, arsenic, and antimony are generally (collectively or separately) present in the auriferous copper bottoms, and that their presence materially facilitates the connection of the gold in the bottoms. Should neither of these be present, the addition of lead is recommended in the shape of litharge or ore, in the reducing of the oxide to a regulus. The metallic bottoms thus formed are again and again submitted to the process of granulation, oxidation, reduction to regulus, and concentration, by selecting until the gold exists in such a proportion to the copper as to render its separation by any of the well-known methods economical. If the metallic copper or bottom should contain silver alone, it is reduced as before described, by granulation, oxidation, and smelting with a sulphurous material to a regulus. They are then enabled to submit it to the process in operation at their works, for which a patent was obtained by John Taylor to extract the silver. If the metallic bottom or copper, be both auriferous, and argentiferous, they treat the regulus derived from each selecting process for silver by their patent, and the bottoms as before described for gold. If any metallic copper or bottom be so alloyed with impurities as to render it of depreciated value, if reduced to a marketable form in the usual way, they granulate, oxidise, and reduce it to a regulus, and are thus enabled to submit the copper as frequently as desired to the selecting process, and thus to obtain from it copper of a superior quality. The inventors claim the reducing metallic bottoms or copper to the state of regulus, and roasting and smelting the same so as to obtain metallic bottoms, in which the gold is concentrated, and is further concentrated by repeating the process; and by which process also a regulus of improved quality is obtained, which may conveniently be treated to separate silver, either by the process for which a patent was granted to John Taylor or otherwise. They also claim the method described for producing a regulus from a metallic bottom or copper, by converting the same into an oxide, and fusing such oxide with a sulphurous compound.

#### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 298 H Street, Washington, D. C. apr12

## SILVER, GOLD, LEAD,

And Other Minerals.

ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

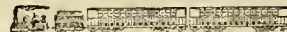
Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

## Norris' Locomotive Works.



PHILADELPHIA.

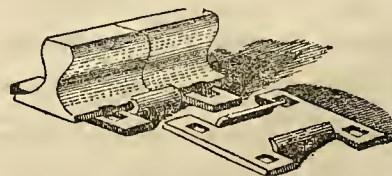
ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy. 27.

RICHARD NORRIS & SON.

## RAILROAD SPIKES.



WROUGHT IRON

## Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

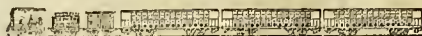
The best quality of refined iron is used, and all orders filled with dispatch. J. HOPKINSON SMITH,

No. 25, South Charles st.

Please direct the name in full.  
Baltimore August 31-7



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12.30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6.30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton

A Steamer leaves Racine for Chicago every evening at 10.30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Asst. Sup't. aug 14

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

### MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAILROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

### W A S O N ' S

## CAR MANUFACTORY,

Near the Pittsburgh R. R. Shops,

CLEVELAND, OHIO.

Passenger, Baggage, Freight, Dumpers, Hand Cars, &c.,

Of the best quality in all respects, style, workmanship and material, made to order with promptness.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

CHARLES WASON,

Late of the firm of T. & E. Wason, Springfield, Mass.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio.  
LEE & LEAVITT.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [Jan-15] Agent.

## PRATT & FREEMAN.

### PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,

PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks, CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-1y

## E. MENDENHALL,

MAP, BOOK & PRINT SELLER,  
Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES

DRAWING INSTRUMENTS, &c.

Publisher of the

Railway Map of the Western States,

In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON CO. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

MAPS OF EVERY DESCRIPTION.

mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Becker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN and NOYE METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles CHAS. W. COPELAND,

Consulting Engineer.

64 Broadway, N. Y.

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

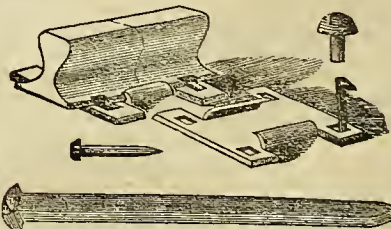
RAILROAD routes located, planned, and estimated

Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mar 15

### GREAT WESTERN

## Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

feb 28

CORBY, GOSSIN & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

## From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

## Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., and 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 2½ hours, and to Washington is but 27¼ hours.

## Fare as Low as by any other Route. FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,  
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

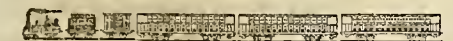
**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,  
Supt Terre Haute & Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA

## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,  
To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.  
TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville, and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street atation as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.  
FOR LAWRENCEBURGH AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,  
Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,  
Ag't Cin. and St. Louis Omnbuses L  
Office No. 2 Burnet House.

Jan 2

1856.

1857. Spring Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST.

## FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities.

Same train connects at Dayton for Dayton & Michigan Road to Troy, Piqua, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburg Philadelphia, &c. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

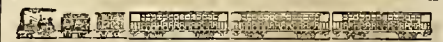
Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M.

For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T., W., & W. R. R., make close connections at Peru for Indianapolis.

JAMES H. MILLS, Supt.

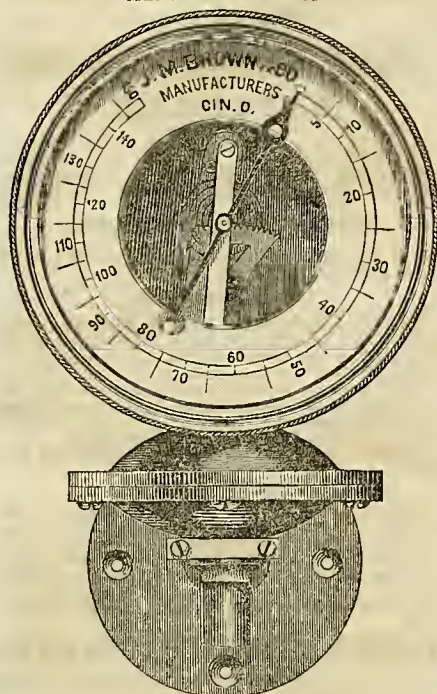
L. N. ANDREWS, Gen. Frtght. Ag't.  
Indianapolis, Sept. 10, 1856.

[mb29-ly.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

### FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



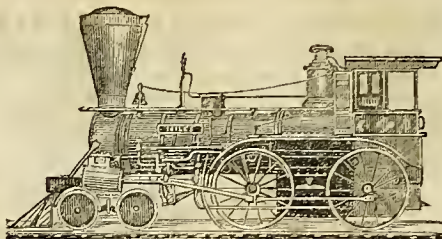
## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
**DRILL THE TUBE-PLATES**  
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tugers.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
62 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI,  
BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

### A. B. LATTA'S

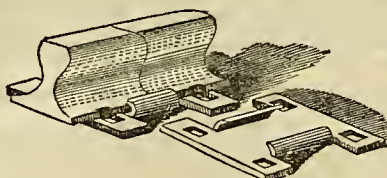
## Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

ap17 A. B. & E. LATTA.  
J. D. GREEN, C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.  
Feb. 14 ly. J. B. GREEN & BRO.

## THE SCHENCK MACHINERY DEPOT AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

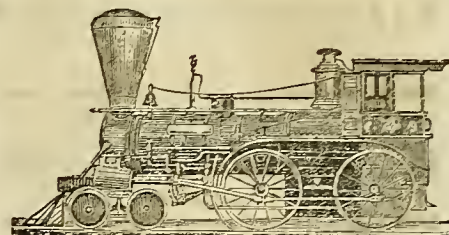
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.40 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS.

From the best Manufacturers, and at their prices. Car, Hand, and Signal Lanterns.

### Cotton Duck for Car Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver Plated Trim mings for Windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other Articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers.

Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.

1066

## GEO. D. WINCHELL & BRO.,

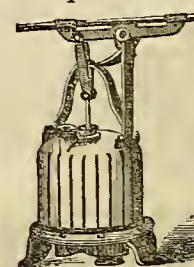
172 Elm Street, between 4th & 5th,

CINCINNATI, O.,

Sole Manufacturers of McGowan's Double Action

## SUCTION & FORCE PUMP

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

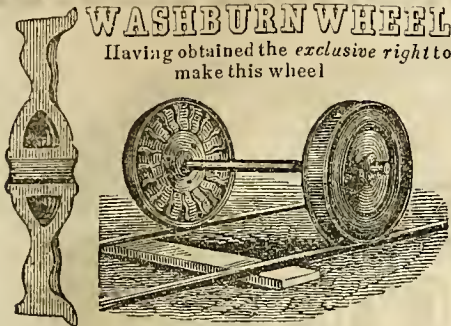
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855



### FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

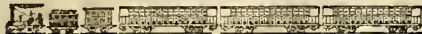


**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Jae Office 62 East Second Street.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



#### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

#### CAR WHEEL,

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

#### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

#### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
jan1. Muskingum Works, Zanesville, O.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,  
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 16+\* **JOSEPH DAVENPORT.**

### S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j **NEWARK, N. J.**

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855.**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so bung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-1y 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW,** 157 Broadway, N. Y.

### ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufactures of  
**LOCOMOTIVE, RAILROAD AND HAND  
LANTHERNS,**  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y.

### THOMAS D. STETSON, Mechanical Engineer,

AND  
**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc23

### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

aug14-1y **P. DUDLEY,** President of the Board.

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** feb19-1m 9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

**THEODORE DEHON,**  
no13 10 Wall st., near Broadway, New York.

### IRON BOILER FLUES, PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1 1/2 to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From 1/2 to 5 inches bore, with Screw end and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

**Warehouse, 85 South Third St.,**  
PHILADELPHIA. | ang

### RAILROAD IRON.

### LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.] **H. H. GOODMAN & CO.,** No. 7 Wall st., N.

### RAILROAD CAR

### AND COACH TRIMMINGS.

### DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**

### IMPORTERS

### OF

**Plain and Figured Mohair Plush,**

Printed & Unsect do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**

**Enameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width**

Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

### PATENT FELT.

**FOR CUSHION & MATTRESS FILLING**

N. B. We have the Plush in bond for exportation. sep18 **DOREMUS & NIXON.**

### RAILROAD RECORD,

### BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts, Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

j64

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point for which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 23d street, N. Y.

**T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.**

**Patent Self-Adjusting Lantern!**  
THE MOST APPROVED LANTERN FOR  
**RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

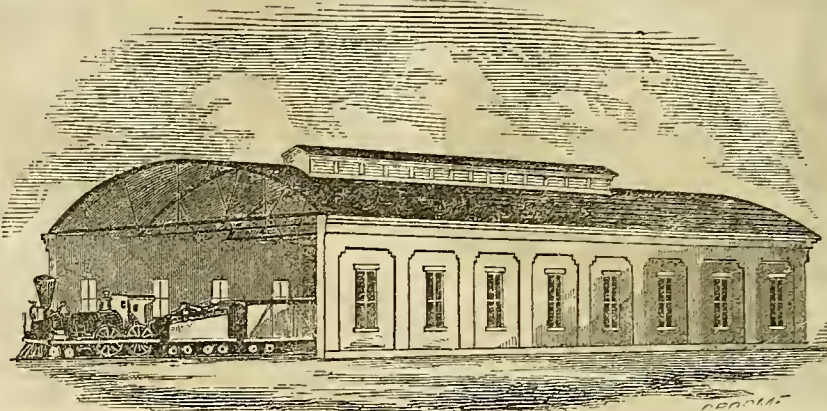
BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-ly 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



**Office, No. 57 West Third Street,  
CINCINNATI, OHIO.**

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of iron supporting now in use, and no more than good wooden trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

**THOS. W. H. MOSELEY, Supt. and Engineer.**

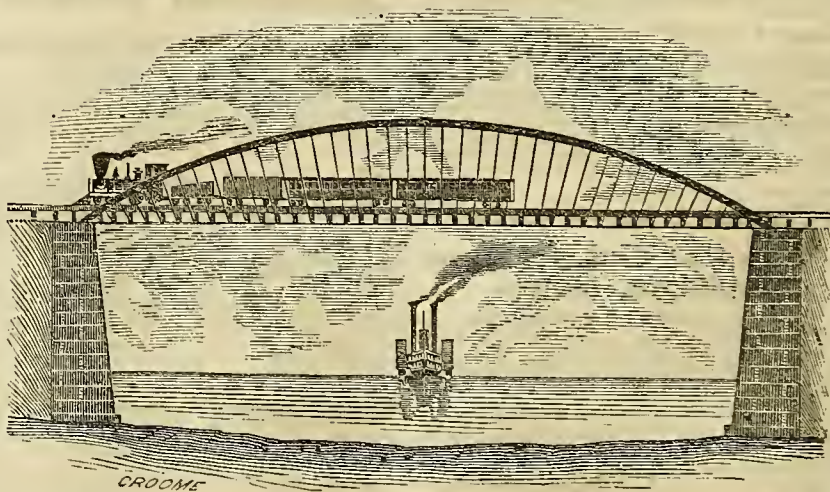
**MOSELEY, WINSTON & MOSELEY.**

January 1st, 1856.

**JOHN BANDON & CO., SPECIAL CONTRACTORS.**

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



**Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.**

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *plate iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by *responsible obligations*.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

**THOS. W. H. MOSELEY,**  
Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - Editor.  
W. WRIGHTSON, Associate Editor.

CINCINNATI:  
THURSDAY MORNING.....APRIL 9, 1957.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 7.

#### EDITORIAL.

The Cincinnati Center of Railroads.....	97
Morley's Joint Chair.....	97
Exotics.....	98
Samuel Crawford.....	98
Skeel's Patent Machine for Shearing Sheet Metals.....	99
Sonora Exploring and Mining Company.....	99
Southern Pacific R. R.....	100
Abridgement of Debates of Congress.....	100

#### RAILROAD DATEREGISTERS.

Buckfield Branch R. R.....	100
Boston & Worcester R. R.....	100
Atlanta & Lagrange R. R.....	101
Androscoquin & Kennebec R. R.....	101

#### RAILROADS.

New Orleans & Pontchartrain R. R.....	102
Iowa Central Air Line R. R.....	102
Bellefonte & Murphysboro R. R. Co.....	103
Baltimore & Ohio R. R.....	105

#### MISCELLANEOUS.

Lead at Galena—Movement of Manufacturers.....	103
Land Grants to Minnesota.....	106
Land Grants to Iowa.....	106
Street Railroads.....	106

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	104
London Quotations.....	105
Cincinnati Stock Sales.....	109
Monetary and Commercial.....	105
Sales at the New York Stock Board.....	105

**MASONIC REVIEW**—A splendid magazine, devoted to the interests of Freemasonry, published monthly by C. MOORE, 117 Walnut street, Cincinnati, Ohio. This work is now in its *seventeenth* volume, and universally popular. Price \$2 a year in advance. *Every Mason should have it.*

**BANKER'S MAGAZINE FOR APRIL.**—The April number of this valuable journal contains important articles on the following subjects: General Law of Missouri to regulate Banks and Banking Institutions; Appendix to Manual for Notaries Public; Foreign Commercial Statistics of the United States; New Coinage Law of the United States; Bank Statistics, &c. It should be in the hands of every monied or business man.

### THE CINCINNATI CENTER OF RAILROADS.

Cincinnati being central to the Ohio valley, and nearly on the line of representative population, it was inevitable that sooner or later it should become a center for an extended railroad system. It has taken, however, much time to accomplish the result, and even yet two important lines are unfinished. It will be well, however, to notice those which are finished, or soon likely to be.

1. The New York line proper. In stating this and other lines, we shall not extend them beyond the limits of the Ohio valley, nor on any other than a direct line from the centre. The New York line is thus formed:

Little Miami R. R.....	Miles. 83
Xenia & Columbus.....	54
Columbus & Cleveland.....	133
Cleveland & Erie.....	90
Erie to Dunkirk.....	50

Aggregate.....412

This includes the Springfield Branch.

2. Cincinnati and Pittsburg *via* Steubenville, 157 miles. This excludes the part already enumerated, and includes the part from Steubenville to Pittsburg.

3. Cincinnati to Pittsburg *via* Alliance, 147 miles. This is only the part beyond Crestline.

4. Cincinnati to Wheeling *via* Ohio Central, 141 miles, excluding all this side of Zanesville.

5. Cincinnati to Zanesville *via* Wilmington Railroad, 131 miles.

6. Cincinnati to Sandusky, 216 miles. This includes the Cincinnati & Hamilton Railroad.

7. Cincinnati to Chicago *via* Indianapolis, 258 miles.

8. Cincinnati to St. Louis *via* Terre Haute and Alton, 260 miles; exclusive of the part to Indianapolis, included above.

9. Cincinnati to Lexington, 96 miles.

10. Branches attached to those at Xenia, Springfield, Dayton, Indianapolis, Zanesville and Columbus, 262 miles.

11. Ohio Valley Line—Baltimore, Cincinnati and St. Louis, 904 miles.

This entire line will be opened in two or three weeks. It comprises the

Cincinnati & Marietta Road.....	Miles. 190
Baltimore & Ohio.....	279
North Western.....	104
Ohio & Mississippi.....	331

Aggregate.....904

The iron is now laid on this whole track except a small distance on the *Ohio & Mississippi*. We understand the whole line will be opened in a short time—about the first of May. Whoever will examine this line on the map will find it literally what we called it—an **OHIO VALLEY RAILROAD**. It comes from Baltimore on the Ohio; will cross the river on a bridge; goes in a practically direct line to the Ohio at Cincinnati, where it is a tangent to the river; thence it goes to the first great city above the mouth of the Ohio; thence it is continued to Kansas, and may, at some

time, be continued to the Pacific Ocean. This line is the *only* one in America which passes through *all* the great cities except New Orleans.

The Ohio Valley Line will be so direct and central that it must necessarily command the east and west business of the Ohio Valley.

12. The NORTH AND SOUTH AXIAL LINE. This line also will stand *alone* in the United States, for it is the only one which can connect the extreme north with the extreme south—from Mackinaw to Florida. This line will be composed of the *Cincinnati & Mackinaw* Line, the *Kentucky Central*, the *Knoxville & Dalton* Line, connecting with the *Georgia & South Carolina* Road, the *McMinnville & Montgomery* Road, the *Montgomery & Pensacola* Road. These lines will be constituted very much as follows:

Cincinnati & Mackinaw.....	Miles. 540
Cincinnati & Knoxville.....	240
Knoxville & Dalton.....	110
Dalton & Atlanta.....	160
Atlanta to Augusta.....	171
Augusta to Charleston.....	137

Mackinaw to Charleston.....1,258

This will be shortened full 100 miles by the Blue Ridge Railroad, but will add the length of that road to those we have enumerated. To this add the Savannah Line:

Atlanta to Macon.....	Miles. 101
Macon to Savannah.....	191

Aggregate.....292

Add the Florida Line, thus:

Danville to McMinnville.....	Miles. 100
McMinnville to Tallahassee.....	25
Tallahassee to Columbiana.....	120
Columbiana to Selma.....	73
Selma to Pensacola.....	100

438

The various lines and parts, then, which make up the great **CENTRAL AXIS** of railroads are:

Mackinaw & Cincinnati.....	Miles. 500
Cincinnati to Charleston.....	758
To Savannah add.....	292
To Florida add.....	438

Central Axis, aggregate.....1,988

Thus we have no less than **FOURTEEN DIRECT RADIAL LINES** of railroad from Cincinnati, comprising between *five and six thousand miles*. It would be easy to double this quantity, by taking in the various connecting lines; but our object here is simply to show that Cincinnati is a great Railroad Center.

### MORLEY'S JOINT CHAIR.

MR. J. H. MORLEY, of St. Louis, late Chief Engineer of the St. Louis & Iron Mountain Railroad, is the inventor of a chair which has been for nearly a year in use on several miles of that road, and seems to possess, in a considerable degree, all the advantages of the fish joint, while it is much less expensive. The chair is of cast iron, in two pieces, connected by two bolts and nuts. The two halves are alike, and, when adjusted, embrace the chair in very nearly the ordinary manner, the edges nearly meeting under the center of the



rail; the bolts cross under the rail at each end of the chair, so that no punching or drilling through the rail is required, as in the fish joint, and with the proportions adopted (weight of castings 28 lbs., size of bolts  $\frac{1}{2}$  inch), not one has failed during the whole severe winter just passed through, on the 17 miles where it was exclusively used.

The great peculiarity of this chair is its firm, yet elastic hold of the rail. The chair bears tightly, both on the upper and the lower faces of the flange of the rail, but the points of bearing are not coincident. The chair bears on the top of the flange at its ends, and supports the under surface in its middle. In other words, the cavity to hold the rail is not straight, but is very slightly crowning, or higher in the center. In order to put the parts together successfully and easily, the ends of the rails to be joined are raised several inches, so that they lie easy in the chair until the nuts are set up very tightly, after which the chair is spiked down upon the cross-ties, as usual—a movement which slightly springs both the chair and the rail, and holds the whole so firmly that, as reported to us, not the least working can be perceived, on the closest observation, as a train passes over it. Rails which had become slightly rounded down at the ends, by the action of the wheels, while held in common chairs, when confined in this grew dark and rusty on the rounded portion, at the last inch or two of their ends, showing that such parts are now untouched by the wheels. The principle of thus straining the joint into a firm connection seems to be an admirable one, and a successful test, during an entire winter, on nearly a score of miles, seems to speak well for its results in practice. The invention has been secured by patent, and Mr. Morley is now traveling East to introduce it. We invite to this peculiarly firm chair the attention it seems so well to deserve.

#### BREVITIES.

—NASHVILLE & NORTH WESTERN R. R.—The citizens of Hickman held a meeting on March 13, for the purpose of devising means to raise \$28,000 to secure the completion of this road to Union City.

—EVANSVILLE & CRAWFORDSVILLE R. R.—The Directors of this road have under favorable consideration the project of extending their line beyond its present terminus to Attica. The operations of the road for the past six months resulted in the relaying of a portion originally built with longitudinal timbers, and liquidating \$40,000 of the floating debt.

—CHARLESTON & MEMPHIS R. R.—This road is completed and running the entire distance from the Mississippi to the Atlantic.

—MARION & MISSISSINAWA VALLEY R. R.—At a meeting of the citizens of Jonesboro', Ind., on March 25, it was resolved that the

citizens of that place would subscribe to the capital stock of this company, provided the location of the road were so changed as to make Jonesboro' a point on its line. This would involve an increase in length of line equal to about two miles. The citizens of Jonesboro' would, in that event, be expected to raise about \$40,000.

—CEDAR VALLEY R. R., MINNESOTA.—On Monday of this week the citizens of Benton county were to vote on the question of loaning the bonds of the county to the amount of \$150,000 to this company. The following is the circular of the road:

The great severity of the past winter, added to their constant duties in taking care of the work progressing between Clinton and Cedar Rapids, has prevented any of the Eastern Directors of the Chicago, Iowa & Nebraska Railroad from visiting the counties along the line of the Cedar Valley Branch, as they had hoped and expected to do. But, though deprived of the pleasure of visiting the people along the line of your road, the Eastern Directors have at no time lost sight of your interest, or failed to appreciate the great importance and value of your Branch. Indeed, its importance and value are too great for the road to be named as a *branch road*, and the Directors of the Chicago, Iowa & Nebraska road no longer so regard it. They consider it a great *trunk road*, uniting the capital of Minnesota and the central region of that Territory with Chicago and the Eastern cities, through one of the richest valleys in the world, and by a line of road that for cheapness and low grades, giving great speed, will prove one of the most remarkable and profitable roads ever built. The Directors of the Chicago, Iowa & Nebraska Road have the pleasure now of assuring the citizens of your counties along the line, that the brightest prospects are opening before the Cedar Valley Road. The late LAND GRANT to the Territory of Minnesota was prepared by Gen. Shields, in conjunction with our own Directors, with direct reference to extending your Cedar Valley Road to St. Paul. Gen. Shields visited Chicago on the 18th of March, and sought an interview with the leading Directors of the Dixon Air Line (Galena) Road, and of the Chicago, Iowa & Nebraska Road, with a view to organize for building the Minnesota line. At that meeting the preliminary arrangements were made uniting your Valley Road with the Minnesota line, in interest, and organizing a company of the most able railroad capitalists in the Union, to build this great Cedar Valley Road from Clinton, through Cedar Rapids and the Cedar Valley, to Saint Paul. These arrangements will be closed by 20th April, by which time we hope that every county laying on the Cedar Valley will have given unmistakable evidence of its zeal and liberality in aid of this great work by votes of county aid.

As our surveys are all made to the State line, no unnecessary delay need occur in having the work soon commenced above Cedar Rapids, and rapidly progressing in every county to the head waters of the Cedar river.

CHARLES WALKER,

Pres't C. I. & N. R. R.

JAMES PURDY, Vice President.

L. D. Crocker, New York; L. M. Flornoy, Kentucky; A. S. Mitchell, St. Louis; C. A. Lumbar, Boston; John Bertram, Boston.

—ALABAMA & FLORIDA R. R.—The Legislature of Florida, at its late session, passed an act authorizing the County Commissioners of Escambia county to subscribe to the stock of the above road, on the following conditions: 1st. The question of subscription must be submitted to the voters. 2d. The amount of the subscription shall not exceed 25 per cent. of the cost of constructing the railroad through the county.

PERDIDO R. R.—The following gentlemen have been constituted incorporators for the purpose of raising a company to build the above road:

William H. Chase, Edward Broughton, Jasper Strong, William Milner, H. F. Ingraham, O. M. Avery, R. L. Campbell, Wm. J. Keyser and Francis Moreno.

The road is to be constructed from a point on the Alabama & Florida R. R. to the line dividing the States, through the mid channel of the Perdido river.

—PITTSBURG, FORT WAYNE & CHICAGO R. R.—This company, which was consolidated from the Ohio & Pennsylvania, the Ohio & Indiana, and the Fort Wayne & Chicago R. R. Companies, give notice that they are now prepared to exchange the old stock of the separate companies for the new stock of the consolidated company.

—MEMORIAL OF THE CREDITORS OF THE STATE OF INDIANA TO THE LEGISLATURE.—Some few days before the close of the session of the Indiana Legislature a memorial was presented from the holders of the canal certificates, in which they claimed that the State, by chartering railroad companies, has materially impaired the value of their bonds, and should grant them some relief.

—ROCK ISLAND & ALTON R. R.—The election in Scott county resulted favorably to this road.

#### SAMUEL CRAWFORD.

We regret to chronicle the sudden death of this gentleman. Mr. Crawford was, at the time of his death, in his 54th year, and had been since 1828 one of the most respectable and prominent citizens of Terre Haute. As a business man Mr. Crawford had few equals, and in social life was much beloved for his warm and generous feelings. He had been for some time President of the Terre Haute & Richmond R. R., and his loss will be severely felt.

At a meeting of the employees of the Terre Haute & Richmond R. R., the following resolutions were passed:

WHEREAS, It has pleased an all wise Providence to remove from his present field of usefulness our late chief officer, Samuel Crawford, Esq. And whereas, it would seem suitable and proper that the employees of this company, who, by being thrown into daily intercourse with him, were best able to appreciate his manliness and worth, should give



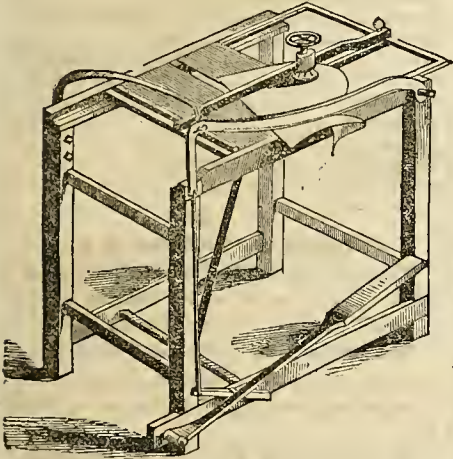
public expression to their feelings in regard to this sudden and solemn event; believing, as they do, that by his death this community has lost a valuable citizen, the working man a true friend and adviser, and the company an honest and faithful officer. Therefore,

*Resolved*, That the employees of this company attend the funeral of the deceased in a body, and wear crape upon the left arm.

*Resolved*, That we tender our sympathy to the relatives of the lamented deceased, in their sudden affliction.

It is rare that the successful in life have the faculty of enlisting the good will and sympathies of those who are under them; and the loss of those who do is a public calamity.

**SKEEL'S PATENT MACHINE FOR SHEARING SHEET METALS.**—This machine is a very simple arrangement for cutting sheet metals, in either straight or circular forms. The knife represented in front of the table is drawn down by a treadle and raised again by a spring.



The sheet to be cut is held to its place by the hand screw in the table. When it is required to make a straight cut, the table and hand screw remain stationary. When it is desired to cut a circle, the table and screw move parallel to the knife, and thus draw the sheet around in a circular shape. The diameter of the circle is graduated by the distance of the screw from the knife. The simplicity of this apparatus will commend itself to our mechanical readers. There is little in its construction to get out of order, and it is easily and rapidly set to cut any size of circle.

We understand that practical iron masters and boiler makers, after a careful and thorough investigation of the operation of this machine, have decided that the principle can be applied with great advantage to the cutting of boiler heads and other articles of heavy plate iron, which now require a great expense of time and labor. A machine for this purpose is to be made in this city.

Below we give the card of several gentlemen who have examined it.

CINCINNATI, O., March 24, 1857.

We, the undersigned, having witnessed the operation of Skeel's Patent Machine, for Shearing Sheet Metal, regard it as well

adapted for cutting both Straight and Circular Forms, thus performing work which has heretofore required two machines.

We deem it a new and most decided improvement on anything of the kind now in use.

Geo. H. KNIGHT & BRO.

THOMAS KITE,

M. GREENWOOD,

ABEL SHAWK, Mechanician,

EDWARD D. MANSFIELD, Editor Gazette,

WM. R. THOMAS,

J. R. HORROCKS.

On exhibition at the office of Geo. H. KNIGHT & BRO., Gazette Building.

#### SONORA EXPLORING AND MINING CO.

We have before noticed the Annual Report of this company. Its mines and lands are located in New Mexico, Gadsden Purchase, near the old and somewhat famous town of Tubac, under Spanish rule, the centre of the silver mining operation of northern Sonora and now the head quarters of this company. Since the publication of the Annual Report, we have been favored with the perusal of the monthly dispatches from the agent and military commander Col. Chas. D. Poston, dated Tubac Jan. 1, 1857. The report says: "When I had the honor of submitting my last monthly report, Messrs Brunckow and Schuchard were absent on a visit to a vein of silver ore about eighteen miles west near the Cerro Colorado, and I had not then an opportunity of forwarding the result of their examination. I have now the pleasure of stating that their impressions were most favorable of the locality, facilities of working, richness of the vein and general indications of a metaliferous region. These impressions have been more than confirmed by several assays of ore picked up on the ground from the outcrop of the vein.

"A final and perfect assay made in the last week, shows a yield of twenty-five marks to the carga, or about seventy-five dollars to the hundred lbs. of ore. I enclose herewith the yield of an ounce of pulverized ore after passing through three several processes of heat, for the purpose of driving off other combinations, in which of course a considerable percentage of silver has been lost."

"This mine will with your permission be called the "Heintzelman Mine." The mine has been taken possession of for the Company and Mr. Moorhman formerly of Tumacacori, with a party of Mexican miners will attempt to open the vein, so as to secure a larger quantity of ore for smelting. The vein does not outcrop very plainly, but supposing the vein, if it is a regular one, to run north and south, a ditch will be cut east and west in hopes of striking it.

Messrs B. and S. our excellent and reliable mining engineers are now on the ground for the purpose of making further examinations and directing the proper opening of the vein.

A postscript to the report says, "Mr. Moorhman has just come in from the "Heintzelman Mine" for weekly rations, and states that the ditch cut there has struck a bed of ore, but not yet the regular vein with investing rock, the

"Respaldo." The ore is abundant and exceedingly rich; the pure silver can be cut from the ore with a knife and the yield upon assay would far exceed that made. There is sufficient ore on the ground to run out several planchas of silver and we will probably rig up the blacksmith's hells to smelt some this month and if possible send you a bar of silver. Messrs B. and S. remain on the ground, they are much interested and in high spirits, but caution me not to say much until assurance is made doubly sure. They say, it appears to be the richest mine yet found in this part of the country, but will not risk their reputation on a statement, until it is ascertained to be a regular vein—a "Respaldo." It is not located in a volcanic region and there is no reason to doubt, but they are not certain of it.

"If it proves a regular vein, it is in itself an immense fortune. Mr. Moorhman says a stone or adobe house must be built there immediately for storage of metal, as it is so rich that Mexicans cannot resist stealing it. This will involve an immediate outlay for hands, materials and provisions."

The report proceeds to say: "About the first of the month we found the old mines in the San Coyetano Mountains, formerly worked by a Frenchman, and called the "Frenchman's Mines," and as they had a high traditional reputation, we set to work there and prospected them a couple of weeks. It was considered desirable to work these mines if they would pay, on account of their close proximity to Tubac, and the abundant resources of timber on the Santa Cruz river, only about 2 miles distant; but upon assay the yield of silver turned out so very small that no further outlay was deemed prudent at present. Houses were constructed and possession taken, so that at a future day, if greater facilities reduce the price of getting ore, the work may be resumed. The mines are not more than a mile and a half distant from the line of Gray's Survey for the Pacific Railroad.

"In making assays, &c., our furnaces at Tubac may be relied upon as fully as mint certificates, as no report will be given until we are fully satisfied of the accuracy of the assay."

The following extract gives a glimpse of an interesting and exciting excursion of a portion of the party, in which something other than silver mines was the principal object. "After leaving the Santa Rita mines we passed up the valley eastwards towards Sonoita creek, and at six miles came to a large, bold vein of gold-bearing quartz, out-cropping, or rather thrown up into a comb, in crossing one of the tributaries of the Sonoita, where there is a fall over the vein of 12 to 15 feet. This vein has been worked by the Spaniards, or Mexican Jesuits, or somebody else, of whom we are totally ignorant. The remains of two fortifications, some arastres, &c., fully attest the value they attached to the place, and the risks and privations they had endured for the purpose of securing the precious ore.

"We passed on from this to the old Puchlo, on the head-waters of the Sonoita, for the purpose of hunting an old silver mine near there worked by the Jesuits 150 years ago, but failed to succeed.



Having wearied our animals in this fruitless search, we turned down Sonoita creek, and through the rich and heavily timbered bottom of that creek to the Calahazos, and thence to Tubae. We shall attempt this mine again.

"After resting a day at Tubae, we visited the country on the west, from Sopori to the Cerro Colorado, examined the vicinity and country adjacent to the 'Heintzelman Mine;' thence westward about thirty-five miles to the Babaquivera Mountains, the enclosing chain on the west, and a metallic-looking region; thence to La Arihae—examined the old mines, water, land and pasturage on that valuable estate, and thence to Tubae, having gained much knowledge of the country, and found several new veins of promising ore, which it was not practicable at that time fully to prospect.

"I may as well state at once that our principal object was to cut off a party of Apaches coming out of Sonora; but, after a week's time spent in watching, they at last gave us the dodge, by sending a party on fleet horses through by San Xavier and Tucson, when the alarm was given that the Indians had passed, and we came in, while the main body passed around by the Pichaeo delos Pimos, on their way to their homes on the Gila, without molestation. The dragoons also made a futile attempt to cut them off, but were completely foiled and thrown off guard, by following the party sent through.

"I can give no better idea of the condition of this country and Sonora than this single incident.

"It may not be amiss, in these desultory remarks, to note the improvement in Tubae and the adjacent country since our arrival. When we forced our wagons here, over the undergrowth on the highway, in September last, no human being was present to greet our coming, and desolation overshadowed the scene. It was like entering the lost city of Pompeii. The atmosphere was loaded with the malaria of a rank vegetation, the undergrowth in the bottom served as a lurking place for the deadly Apache, and the ravens in the old church window croaked a surly welcome.

"Now the highroads are alive with trains and people. Commerce, agriculture and mining are resuming their wonted prosperity under the enterprise, intelligence and industry of our people. The former citizens of Tubae have returned to the occupation of their houses, set to work vigorously on their milpas and are loud in their praises of American liberty and freedom.

"At our municipal election on Christmas, fifty-five votes were polled and our excellent member Ward elected Alcalde. The number of souls in or near Tubae numbers over one hundred and fifty and every week adds a number of families to this increasing population."

With this encouraging view of the increase in population and importance of Tubae, the headquarters of this company, we must close our extract from the report. The opening of the Heintzelman Mine, makes the number of silver mines now owned by the Sonora Exploring and Mining Co. fifty, and when these mines

are placed, as we doubt not they will soon be, in a state of active and permanent development, we do not hesitate to say the results will justify the risk and outlays that this company has made in developing this once prosperous, but for many years past wilderness regions.

The advertisement of the agent of this company will be found in another column.

**SOUTHERN PACIFIC RAILROAD.**—We learn from the New Orleans papers that a meeting of the Directors of this Road was held in that city on March 27th, the proceedings of which will be deemed interesting to all who hold stock in the road. The resolutions were adopted unanimously, and declare themselves to be a portion of a contract for the sale of twelve millions of the five per cent. stock of this company at the South. They also provide that on the disposal of as much of this issue of stock as will pay into the treasury \$300,000 in cash, the office of the company with all its books, papers, etc., shall be transferred to New Orleans, and that four Southern Directors shall be chosen in place of four of the present Northern Directors. It is also provided that the bonds of the company may be issued when necessary for the construction of the Road, but they shall convey no individual liability to the stockholders.

The effect of the above resolutions will be to place the control of this important enterprise at N. Orleans. Mr. Allen, the President of the Road resigned, and Mr. Geo. S. Yerger was elected to fill the place. Mr. Yerger has issued an address to the public, in which he states his conviction that the charter of the company gives it land enough to build its line and leave an ample surplus.

The following is the statement of stock issued up to March 13, 1857, as given by the Vice President, Mr. Edwin Post:

Full paid \$100 per share .....	6507
Scrap Stock \$5 " " paid .....	259637
" 4 50 " " " " .....	2265
" 4 00 " " " " .....	2137
" 3 50 " " " " .....	1125
" 3 00 " " " " .....	112372
" 2 50 " " " " .....	52485
Total shares issued.....	456526
On this the company have received....	\$2,474,790 50

**ABRIDGEMENT OF THE DEBATES OF CONGRESS FROM 1789 TO 1856, By THOMAS H. BENTON: Vol. I.**—This great national work is to be completed in fifteen volumes, and is well worthy of the recommendations it has received from Mr. Buchanan, J. C. Breckenridge, Edward Everett, Gov. Chase, Geo. Bancroft, and other leading men. To all Literary Societies and public men, this work will be invaluable. The book is sold only by subscription. Price in cloth \$3 per vol.; Law sheep \$3 50. Anderson, Gates & Wright, No. 112 Main-st., are the agents for Cincinnati, and are also the agents for the West for Benton's previous work, "Thirty Years in the U. S. Senate."

## Railroad Daguerreotypes.

No. LXX.

### BUCKFIELD BRANCH R. R.

The report of this company is dated November, 1856. The following are its officers:

Proprietor and Manager—F. O. J. SMITH, Portland, Me.

Superintendent—J. HARLOW, Buckfield, Me.

#### RUNNING EQUIPMENTS.

Number of Locomotives. 2.  
Passenger cars, 1st class 1.  
Express, " " 1.

#### DETAILS OF CONSTRUCTION.

Length of road.....28½ miles.  
Termini.....Mechanics' Falls & Canton Point.  
Gauge.....5 feet 6 inches.  
Single track.....18 miles laid.  
Sidings.....1 "  
Length of rail-bars.....16 to 18 feet.  
Weight per yard, rail.....45 to 56 lbs.  
Kind of iron.....American.  
When laid.....1848 to present time.  
Kind of rail.....T and U.  
Ties.....Hemlock and Ash.  
Length.....8 feet.  
Size.....6 by 6 to 8 inches.  
How often changed.....From 7 to 10 years.  
Ballast used.....Gravel.  
Kind of fuel.....Wood.  
Amount per annum.....300 cords.  
Telegraph.....13 miles.

No. LXXI.

### BOSTON & WORCESTER R. R.

The report of this road is dated December 1, 1856. The following are its officers:

President—GEO. MOREY, Boston.

Treasurer—HORACE WILLIAMS, Roxbury.

Secretary—N. T. J. GREEN, Boston.

Superintendent—GINERY TWICHELL, Brookline.

Auditor—DAVID WILNER, JR., Brookline.

#### DIRECTORS.

GEO. MOREY, Boston.

DANIEL DENNY, Dorchester.

NATH'L HAMMOND, Boston.

B. F. WHITE, "

ISAAC EMERY, "

WM. PARKER, "

EMORY WASHBURN, Cambridge.

ISRAEL LOMBARD, Newton.

The ANNUAL MEETING of the stockholders is held on the first Wednesday in February.

The CAPITAL STOCK is as follows:

Number of shares.....45,000.  
Price per share.....\$100.  
Capital.....\$4,500,000.  
Dividend.....7 per cent.  
Am't of last dividend...\$18,000 6 mos., 4 per ct.

The DEBTS of the road are:

Domestic Bonds.....\$500,000.  
Interest.....6 per cent.  
When due.....1860.  
Floating debt.....\$114,514 40.  
Interest.....6 per cent.  
When due.....On demand.  
Mostly balances to individuals and other roads.

#### RUNNING EQUIPMENTS.

Number of Locomotives.30.  
Passenger cars.....58.  
Bag. & Ex. " " 8.  
Freight " " 8 wheel.345.



The following are the results of operation for the years 1854, 1855 and 1856:

RECEIPTS.			
	1854.	1855.	1856.
Passengers and Exp....	\$512,765	\$529,185	\$566,125 60
Freight.....	405,498	444,981	509,225 31
Mails.....	15,946	10,532	11,225 27
Miscellaneous, rents, &c.	17,685	23,345	22,215 72
Cost of operation.....	\$574,538	\$603,543	\$1,08,781 90
			671,719 87
			\$437,062 03

#### DETAILS OF CONSTRUCTION.

Length of road.....	44½ miles.
Branches.....	24 " "
Do. Rented.....	15 " "
Termini.....	Boston and Worcester, Framingham & North-bury, and various other places.
Gauge.....	5 feet 6½ inches.
Single track.....	39 miles.
Double track.....	44½ " "
Length of rail-bars.....	15 to 24 feet.
Weight per yard.....	56 to 68 lbs.
Kind of Iron.....	American and English.
When laid.....	From 1842 to date.
Kind of rail.....	8 different patterns.
Ties.....	Chesnut and Cedar.
Length.....	7 and 7½ feet.
Size.....	6 by 6 & 7 by 7 to 12 in.
How often changed.....	In about 6 years.
Ballast used.....	Gravel.
Fuel.....	Wood and coal.
Cost per annum.....	\$130,000.

Two lines of Telegraph on road.

On the 4th of February, 1857, at the annual meeting of stockholders, there were chosen, as Directors:

Daniel Denny, Nathaniel Hammond, Benj. F. White, Emory Washburn, William Parker, Israel Lombard, Ginery Twichell, Charles H. Mills, Peter T. Homer.

Ginery Twichell, President and Superintendent.

#### No. LXXII.

##### ATLANTA & LAGRANGE R. R.

The report of this road is dated Nov. 25th, 1856. The following are its officers:

President—JOHN P. KING, Augusta, Ga.  
Secretary and Treasurer—JOHN B. PECK, Atlanta, Ga.

Superintendent—GEO. G. HULL, Atlanta, Ga.

#### DIRECTORS.

PLEASANT STOVALL, Augusta.  
RICHARD PETERS, "  
A. J. BERRY, Newnan.  
J. E. ROBINSON, "  
JESSE McLENNON, Lagrange.  
O. A. BULL, "

The ANNUAL MEETING of the stockholders is held on the 25th of July.

The CAPITAL STOCK is as follows:

Number of shares.....	10,000.
Price per share.....	\$100.
Capital.....	\$1,000,000.
Interest.....	8 per cent.
Am't of last dividend...	\$40,000 semi-annual.

The DEBTS of the road are:

Domestic.....	\$119,000.
Interest.....	7 per cent.
When due.....	July 1, 1862.
Interest payable.....	1st Jan. and July.

#### RUNNING EQUIPMENTS.

Number of Locomotives.....	14.
Passenger cars, 1st class 6.	
" " 2d " 2.	
Baggage " " 2.	

These are used in common with the Georgia Railroad.

The following are the results of operation for the years 1854, 1855 and 1856:

RECEIPTS.			
	1854.	1855.	1856.
Passengers.....	\$114,477 35	126,835 32	148,329 63
Freight.....	65,108 82	93,840 82	107,250 35
Mails.....	15,700 00	18,440 00	20,543 76
Express.....	345 10	2,000 00	2,600 00
Cost of operation.....	\$70,543 54	89,882 39	\$278,123 74
			104,343 00
Net earnings 1856.....			\$183,780 74

#### DETAILS OF CONSTRUCTION.

Length of road.....	86½ miles.
Termini.....	Atlanta and West Point.
Gauge.....	5 feet.
Single track.....	86½ miles.
Sidings.....	15,000 feet.
Length of rail.....	Average 20 feet.
Weight per yard.....	50 lbs.
Kind of iron.....	American and English.
When laid.....	1851 and 1852.
Kind of rail.....	T.
Wear and tear.....	30 per cent.
Ties.....	Chesnut, White and Post Oak.
Length.....	8 feet.
Size.....	7 by 10 inches.
How often changed.....	Every 5 years.
Ballast used.....	Hard clay.
Fuel.....	Pine and Ash.
Amount per annum.....	7,500 cords, at \$1 25 per cord.

REMARKS.—The Atlanta & Lagrange Railroad was built at a cost per mile of \$12,560, including equipment. Interest has been regularly paid to stockholders from date of subscription. The sinking fund is now \$100,000. No casualty has ever occurred to trains except such as were caused by obstructions placed upon the track, or by cattle, and thus unavoidable. No passenger has ever been injured upon the road.

This road forms a part of the great line of Northern and Southern travel, connecting with the Georgia Railroad at one end and the Montgomery & West Point at the other; also, forming the shortest communication between the State of Tennessee, or Upper Georgia and Columbus, with all points South and West, by means of the Western & Atlantic and Nashville & Chattanooga Railroads, with their connections; making a desirable route for shippers of whisky, rope, bagging, &c., from Cincinnati or St. Louis.

#### No. LXXIII.

##### ANDROSCOGGIN & KENNEBEC R. R.

The report of this road is dated Dec. 1, 1856. The following are its officers:

President—JOHN WARE, Athens, Me.  
Treasurer—JOSHUA NYE, Waterville, Me.  
Clerk—WM. GOONENOW, Portland, Me.  
Superintendent—ENWIN NOYES, Waterville, Me.

#### DIRECTORS.

JOHN WARE, Athens.  
WM. CONNOR, Fairfield.  
JENIAH MORRILL, Waterville.  
SOLOMON H. CHANDLER, New Gloucester.  
IRA CROCKER, Portland.  
WM. GOONENOW, "  
WM. WILLIS, "

The ANNUAL MEETING of the stockholders is held on the last Wednesday in June.

The CAPITAL STOCK is as follows:

Price per share.....	\$100.
Capital authorized.....	\$1,400,000.

The DEBTS of the road are:

1st mortgage.....	\$1,000,000.
Interest.....	6 per cent.
When due.....	Mostly in 1860.
2d mortgage.....	\$498,800.
Interest.....	6 per cent.
When due.....	Mostly in 1862 & 1863.
Domestic.....	\$26,700.
Interest.....	6 per cent.
Floating debt.....	\$67,464.

#### RUNNING EQUIPMENTS.

No. of locomotives.....	9.
Passenger cars, 1st class 10.	
Baggage " " 4.	
Freight " " 120.	

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends May 31:

RECEIPTS.			
	1854.	1855.	1856.
Passengers.....	\$85,100	\$97,910	\$107,416 70
Freight.....	68,284	85,190	94,931 12
Mails, Express, &c.....	7,411	7,475	7,127 64
Cost of operation...	\$161,391	\$199,605	\$209,475 46
	67,950	94,806	*99,228 43
Net earnings 1855.....			\$110,246 98

\*Including all expenses; construction account closed.

#### DETAILS OF CONSTRUCTION.

Length of road.....	54.55 miles.
Termini.....	Waterville and Danville Junction.
Gauge.....	5 feet 6 inches.
Single track.....	54.55 miles.
Sidings.....	About 7,800 feet.
Length of rail bars.....	Mostly 18 feet.
Weight per yard, rail.....	66 lbs.
Kind of iron.....	English.
When laid.....	1848 and 1849.
Kind of rail.....	U.
Ties.....	Hemlock, Ash, Oak and Cedar; mostly latter.
Length.....	8 feet.
Size.....	6 by 5 to 12 inches.
How often changed.....	Once in 12 years.
Ballast used.....	Coarse Gravel, 18 to 30 inches deep.
Fuel.....	Hard and Soft Wood.
Amount per annum....	4,000 cords; cost \$15,000
Telegraph on road.	

No estimate has been made of the per cent. wear and tear of iron. 100 tons re-rolled in 1856, and about 3-100 of the whole number of bars mended where battered at ends.

#### MILES RUN.

Passenger trains.....	67,000
Freight " ".....	41,000
All other " ".....	16,110

MINERAL POINT RAILROAD.—Our readers will no doubt be gratified to learn that the railroad from Warren to Mineral Point, Wisconsin, has been finished, and that next week cars will leave this city and run direct to Mineral Point. This road opens up to Chicago a most important section of country—rich in its mineral and agricultural resources. The lead mines alone cannot fail to make it one of the most prosperous regions in the Northwest.—Chicago Times.



## Railroads.

### NEW ORLEANS & PONTCHARTRAIN R. R.

This is a short railroad, of six miles in length, connecting New Orleans and Lake Pontchartrain, and partakes somewhat of the character of a city railroad. Its annual report, dated Dec. 1, 1856, will be of some interest to our readers.

The President says:

"At your last annual meeting the affairs of the company were in a very uncertain condition. The litigation with the city of New Orleans was then pending, and serious fears were entertained about effecting any satisfactory arrangement.

"I am happy to inform you, however, that that vexatious suit has been brought to a close; the company returning to the city 300 of the bonds issued for the Mobile Railroad, with the interest thereon, and obtaining a final decree from the Court dissolving all connection.

"In order to raise funds to procure the bonds, it became necessary to mortgage the property of the company for the sum of \$110,000. Some of the stockholders promptly assisted me in making the needful monetary arrangements, by endorsing these notes, the first installment of which has been paid, and part of others anticipated.

"I have every reason to believe, without some unforeseen event, that all remaining engagements will be promptly met at maturity, if not at an earlier day.

"Before the adjournment of Congress last summer I went to Washington, and assisted in procuring a grant of land for the Mobile & New Orleans Railroad Company, which may ere long induce some enterprising capitalist to come forward and undertake to build that road. If so, we shall not only realize on the stock we own, but have the benefit of additional trade and travel."

The Superintendent says:

"The total indebtedness of the company amounts to \$86,110 28, of which \$65,840 consists of mortgage notes—\$11,925 due 25th April, 1857; \$31,440 due 25th October, 1857; and \$22,495 due 25th April, 1858. Other notes amount to \$9,386 05, maturing in next twelve months, making a total of notes payable of \$75,226 05. The remaining indebtedness amounts to \$10,884 23. This portion of liabilities, however, is nearly provided for by available assets. Thus—the amount due Reeves, Buck & Co., Philadelphia, will be covered by shipment of old rails, and the amount to other individuals by cash, freight bills, &c., leaving the notes payable, as above, \$75,226 05, to be provided for by income.

The expenses of "litigation with the city" amount now to \$5,520, as will be seen by the account. There are two other claims for attorney's fees yet unsettled; but it is hoped

that they will be adjusted without seriously impairing the company's means, in which case the income of the next year, with a moderate increase, may come very near placing the company entirely out of debt.

"The account of 'city taxes' includes the taxes of three years. That expense will hereafter be reduced to about \$2,000 per annum.

The receipts proper of the road for the year now ended amount to.....	\$110,197 00
The working expenses during the same period.....	49,656 70

Leaving the earnings or receipts.....	\$60,540 30
To which add the income from rents and mails.....	52*5 00

Makes the total earnings for 1856.....\$65,815 30

"The earnings of the road this year exceed the average of ten years from 1841 to 1850, \$45,167 37—the average of five years from 1851 to 1855, \$21,484 94—and the year 1855, \$14,553 97.

"The number of passengers transported over the road during the year past amounts to 237,989, being an excess of 18,192 over the previous year, and 3,969 over the largest year in last fifteen, and is probably the largest number ever passed over the road in any year since its construction.

"The freight transported over the road this year amounts to 63,374 tons, being 3,357 tons more than the previous year, but 1,304 tons less than 1853.

"It will be seen that the expenses of working the road this year are less by \$9,771 27 than the year previous, \$10,232 95 less than the average of five years previous, and somewhat less than the estimate made in last Annual Report, which was \$50,100. It is believed that these expenses can be kept within that estimate, and that the annual expenditure for 'New Work and Repairs,' from this time forward, need not exceed \$7,500. The same amount, say \$7,500 per annum, as a *reserve fund*, will be sufficient to maintain the road and property of the Company in complete order, besides enabling it gradually to fill up the enclosures beyond the Hotel on each side of the track, and to make a solid track as far out in the lake as the Light House; both of which improvements would greatly promote the interest of the Company. The total expenditures, then, in every form, will not exceed say \$65,000 per annum.

"An entire new track has been completed from Marigny Canal to the Lake, and the trains are now regularly passing over it, making a straight line from city to lake. The work is believed to be equal to any other in the Southern country. The rails of the old track are to be taken up, except a half mile at Gentilly Ridge, which will remain and be connected by switches with the new, so as to form a *turn out* to pass steam trains, and for the use of a horse-car to be run between the City and the Ridge during the day."

### IOWA CENTRAL AIR LINE R. R.

The contract for the construction of this road from the Mississippi to the Missouri river, was signed in New York. The terms of the contract are that the company shall pay the contractor in bonds \$30,500 per mile for a *first class* railroad, ready built and equipped. The equipment will, in part, consist of thirty-five first class locomotives, twenty passenger cars, eight hundred freight cars, thirty-five hand cars.

The contractors agree to complete the road within nine months to Maquoketa, 34 miles west of Lyons; to Anamosa, 69 west of Lyons, by Nov. 1st, 1858; and to Marion, 86 miles west of Lyons, by Jan. 1st, 1859. The whole is to be delivered over (completed) to the company in five years from the time the securities are placed in the hands of the Trustees.

The road is to begin at Sabula, opposite the western terminus of the Racine & Mississippi R. R., and, together with a branch beginning at Lyons, opposite the terminus of the Chicago & Dixon Air Line R. R., will include a total of 350 miles substantially on the parallel of 40 degrees. The contractors are Reed & Courtright, of Erie, Pa., Morris & Bishop, of New York, Col. Mason, of Dubuque, and their associates.

The Chicago *Tribune* gives the following description of the financial plan of the company:

"The capital stock of the company will consist of \$15,500,000, of which sum \$1,300,000 will be paid up stock; the other \$14,200,000 will be represented by 'opinions,' or 'rights,' which will mature into full paid stock as fast as the proceeds of the sales of the lands belonging to the company shall take up the bonds. A portion of those rights will go with the bonds, a portion will go to the contractors, and a portion with the full paid stock. The plan of the company in this respect is very similar to that adopted by the Dubuque & Pacific Road. Three Trustees were appointed to sell the bonds and the lands for the redemption of the bonds, viz: Messrs. Thos. F. Walker and C. B. Raymond, of New York city, and N. W. Isbell, Vice President of the road, and late one of Judges of the Supreme Court of Iowa."

This road has land grants to the amount of about one million acres, granted by Congress to Iowa to aid its railroad enterprises.

Our readers will see from the above that this company purpose building a road of 350 miles at a cost of over ten million dollars, and of this large sum but \$1,300,000 will be represented by stock. Of the proceeds of this stock, according to the scheme laid down in the *Tribune*, not one cent will go into the construction of the road. It will be built on credit from beginning to end. The land basis of this road may afford sufficient security to the bondholders; but, for ourselves, we confess that we have always believed the stockholders should make some investment proportionate to the magnitude of the work in which they were engaged.



From the Missouri Republican.

# **BELLEVILLE AND MURPHYSBORO RAILROAD COMPANY.**

The Legislature of Illinois, on February the 18th, passed a bill for an act amendatory to an act incorporating the Belleville and Murphysboro' Railroad Company.—The amendatory act authorizes the Company to extend its road to Paducah, and to construct bridges over any streams, including the Ohio river. We publish the bill this morning, which our readers will see is exceedingly liberal in its provisions, and confers important privileges upon the corporation.

The importance of this road to St. Louis is much greater than appears at first glance. It is to bring us ultimately into direct and short communication by railroad with New Orleans and Mobile. The route may be easily traced on the last edition of Colton's Map of the United States. Starting from St. Louis over the route already surveyed to Murphysboro', on the Illinois Central, distant ninety miles from this city, it crosses the Central and strikes the Ohio river at Paducah, distant one hundred and forty-five miles from St. Louis. Thence it crosses the western end of Kentucky, passing into Tennessee, through Dresden, Jackson, and other towns, striking the northeastern corner of Mississippi, running the eastern border of the State nearly its entire length, passing through Jacinto, Macon, and other considerable towns, crossing the New Orleans and Great Northern Railroad seven miles below Aberdeen, and entering the State of Alabama, about sixty miles north of Mobile, thence direct to that city. It is from Paducah almost an air line route, and the entire distance from St. Louis is about 600 miles. From Paducah to Mobile it is 475 which added to the distance from Paducah to St. Louis is 620.

This chain of communications between the Mississippi river, at St. Louis, and the Gulf of Mexico, at Mobile, will be completed at an early day. The lower portion of the road from Mobile, is finished, and the the cars running to a point North of Macon, a distance of over two hundred miles.

From Paducah the road is graded thirty miles, to Mayfield, and cars are making daily trips about fifteen miles. The principal obstacles with which the upper portion of the road has been long contending, have recently been removed by the dismissal from office of the parties, who from interested motives, were endeavoring to divert the business of the road from Paducah, to a point on the Mississippi river, below the mouth of the Ohio.—Their removal from office has given a new impetus to the road, and its former friends, who had become dispirited, are now rallying again to its support. During a morning's canvass, recently, in Mobile, four hundred thousand dollars were subscribed by ten gentlemen, for the continuance of the road to the North.

The difficulty which had existed between the two Boards at Mobile and Paducah, has been settled, and the Ohio Company are now willing to comply with their original contract to furnish to the Ohio and New Orleans Company the iron sufficient to lay the track to the Tennessee State line. They have also, recently (last week,) endorsed the Bonds of the City of Paducah, and of McCracken county, to the amount of three hundred thousand dollars, subscribed for the completion of the Ohio terminus of the road. And, as an earnest that the terminus of the road will be at Paducah, the Company quite lately purchased

thirty-six acres of ground, at a cost of \$7,200, one mile and a half from Paducah, for the purpose of erecting machine shops, &c., and have located the depot, nine hundred feet long, by three hundred wide, in the suburbs of the city.

We understand that arrangements are about completed for an immediate survey of the route from Murphysboro' to Paducah. The entire route to Paducah from this city is on an air line, the topography of the country subjecting the road to only unimportant deviations, and imposing but moderate grades in any portion of the route. It can be built at comparatively small cost. It is by this road to Paducah, and thence South, that the railroad travel to Mobile and New Orleans must ultimately go. The New Orleans and Great Northern Railroad intersecting this road near Aberdeen, offers to travelers an easy transit, if they desire to diverge from the Mobile route.

When this line of road is completed, we shall be within six hundred and twenty miles of Mobile, and three and a half days of Havana. We can take our breakfast in St. Louis, and dine the next day at New Orleans.

We presume the company chartered by the Illinois Legislature will, during the summer, put their portion of the road under contract, and soon organize for the purpose of bridging the Ohio river at Paducah, a point ascertained to be in every way suitable for the construction of a bridge for railway purposes and general travel. With that portion of Kentucky and of Tennessee through which this road is to pass, St. Louis has already established important business relations, that are largely extended every year. Any increase of the facilities of communication with that region of country must be regarded by St. Louis as personal to itself, and excite unusual interest in business circles. The roads leading from St. Louis into the interior of Missouri, and eastward into Illinois, sustain scarcely a more intimate relation to the prosperity of St. Louis than will this proposed road when it is completed. For it not only opens to us a direct line of communication with our customers in southern Illinois, Kentucky and Tennessee, but it furnishes a means of rapid interchange of business transaction with New Orleans, a city bound to us by innumerable commercial ties; with Mobile, and with Cuba, with the latter of which our business is augmenting every season. If the Tennessee portion of the line is pushed with energy, and the continuance of the line is prosecuted diligently, as recent subscriptions promise that it will be, within two years St. Louis, New Orleans and Mobile will be linked together in an iron embrace.

We append the bill for the Illinois road, alluded to above.

*A Bill for an act to further amend an act entitled an act to incorporate the Belleville and Murphysboro' Railroad Company, and for other purposes. Approved February 18th.*

SECTION 1. Be it enacted by the people of the State of Illinois, represented in the General Assembly, That said Belleville and Murphysboro' Railroad Company shall be authorized to extend its road by the most feasible route from its point of intersection with the Illinois Central road to such point on the Ohio river opposite to or in the city of Paducah, in the State of Kentucky, as the Company may think advisable; and said Company, or any other railroad company incorporated by this State, shall be authorized to construct their

road across any stream of water or water course, by such bridge or bridges, viaduct or viaducts, as may be deemed useful or necessary to enable them to unite with any other road, whether within or without this State. The capital stock of said Company may be increased, by a vote of the Directors, to an amount sufficient to cover the cost of construction and equipment.

SEC. 2. The Board of Directors of said Company are hereby authorized to receive in payment of subscription to the capital stock of said Company, lands and real estate and notes secured by mortgage or deeds of trust, and to negotiate, sell and guarantee the same, and to hold, mortgage, sell and convey such real estate held as aforesaid, in such manner as they shall deem most conducive to the interest of said Company.

SEC. 3. This act shall be deemed and taken to be a public act, and shall be in full force from and after its passage.

## **LEAD AT GALENA—MOVEMENT OF MANUFACTURERS.**

The following table exhibits the amount of lead brought to Galena, and the price, from 1842 to 1856:

Years.	Pig Lead.	Total lbs.	Price.
1842.....	417,909	31,353,600	\$2 24
1843.....	559,261	39,148,270	2 34
1844.....	624,672	43,727,040	2 20
1845.....	778,498	54,494,360	2 89
1846.....	782,403	51,269,210	2 99
1847.....	779,636	44,085,920	3 17
1848.....	681,969	47,737,830	3 24
1849.....	628,934	47,025,360	3 67
1850.....	568,389	33,188,030	4 20
1851.....	471,015	38,123,050	4 18
1852.....	408,628	27,663,860	4 12
1853.....	425,814	29,306,980	5 50
1854.....	422,617	29,653,160	6 50
1855.....	430,365	30,125,550	5 75
1856, estimated 25 per cent. less than 1855.			6 50

The manufacturers of white lead, lead pipe, shot, &c., have petitioned Congress to place the raw material, pig lead, on the free list, and the committee have reported favorably upon their petition. The petitioners argue that the production of lead in this country has largely decreased, notwithstanding an increase of 100 per cent. in price, and that about the entire production is consumed at the West, so that the introduction of foreign lead free would be no detriment to the native miner. They also argue that the 20 per cent. duty on pig lead entirely closes the market of Canada, the West Indies, &c., against our white lead, shot, lead pipe, &c., these markets being monopolized by the English manufacturers, who have no duty to pay on the raw material.

In 1854 there was imported into the single port of New York 55,945,900 lbs. of foreign lead—more than the Galena mines ever produced in any one year. Notwithstanding a great advance in price, the annual production of lead has greatly fallen off since 1847—the miners having been drawn off by the stronger attractions of the California placers; and, unless the business of lead mining should be prosecuted with more vigor from this time forward, it is believed that in 1857 the western manufacturers of lead will have to procure a portion of their staple from imported foreign lead in the Atlantic cities. We have been gratified to observe during the last year, however, that the owners of mineral lands in Wisconsin and Iowa have engaged in mining with renewed energy; and, as the supply is abundant, we presume the market will show a considerable increase in the product of the present year. With such an abundance of ore of the richest quality, scattered through several States, we ought not to be dependent upon foreign countries for lead.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Quot of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	173	Albany, Litchfield & Hampshire		173	5,000,000.00				
498,800	6			1862-3	2d	5455	Androskog'n & Kennebec		5455	1,400,000.00		209,475.46	110,246.98	none.
199,050	7	July & Jan.			Domestic.		Atlanta and LaGrange...		86.5	1,000,000.00	129,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646				now	"		B'ngr, Old T. & Milford...		12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000m '53
500,000	6		N. Y.	1860	"	44 5-8	Boston & Worcester...			4,500,000.00	500,000.00	1,108,781.90	437,062.03	1800m 4.6m
500,000	7			1857-9-62	1st mortgage.		Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000	7			1864	Domestic.		"							
200,000	7				4th mortgage.	30	Central Ohio...		43	1,872,000.00	1,001,067.00	168,200.00	77,760.00	10 per ct.
577,187	6			1872	1st mortgage.		Champlin & St. Lawrence		110	1,700,000.00	380,000.00	291,219.86	47 per ct.	\$72,260
192,200	7			1874	2d		Ch'n'te & South Carolina...		138	3,746,900.00	3,114,000.00	1,093,165.00	571,725.23	15 pr. ct. 6m
280,000	7		N. Y.	1864-7	1st mortgage.		Chgo, Burling'n & Quincy...							
1,440,000	6-7-8			1868-9	2d		"							
1,300,000	8			1868-76	Convertible.		"							
374,000							Chicago, Fulton & Iowa...		131	7,561,149.16	2,241,500.00	221,491.96		
1,500,000					1st mortgage.		Cin. Willing'n & Zanesville							
532,000					2d		"							
104,000					3d		"							
305,500					Income.		"							
540,000	6			1873	1st mortgage.	85	Cleveland & Mahoning...			1,500,000.00				
400,000	7			1864	2d		"							
000,000	7			1873			Cumberland Valley...		52	1,218,300.00		160,511.56	81,101.56	\$32,250.24
500,000	8			1857-8-9	1st mortgage.	52	Dayton & Cin. short line.		52	1,000,000.00	1,000,000.00	665,578.79	268,077.84	\$234,133
350,000						930-10	Eastern Railroad...		120	3,345,000.00		30,897.20	19,692.30	
740,000	7			1869	1st mortgage.	20	East Ten. & Virginia...		109	2,228,657.0		243,970.42	136,061.90	\$123,281.45
88,000	10			1861	2d		Essex Railroad...			700,000.00		681,162.52	213,837.81	3 per cent.
400,000	7			1864	1st mortgage.	33	Evansville & Crawf'd'vle		23	3,540,000.00				
200,000	10					15	The Fitchburg (Mass.) R.R.		233	2,000,000.00		50,381.23	14,892.45	\$166,240.00
100,000	6				1st mortgage.	20	Fox River Valley...		20	4,156,000.00		1,068,212.54	357,659.42	\$66,240.00
100,000	6				2d		Fair Haven Branch...					27,376.69	14,207.07	
300,000	7			1858	1st	281 1/4	Georgia RR & Banking Co.		74	4,191,550.00		2,068,836.60		8 pr. ct.
4,000,000	6 1-9			1869-70	1st	74	G't West'n R.R. of Can.		141	2,000,000.00		339,196.50	176,529.97	
2,000,000	7			1860	2d	144	Housatonic Railroad...		144	4,000,000.00		1,924,322.44	718,037.40	
1,812,000	7			1875	3d mortgage.	144	Hudson River...		144	4,000,000.00				
2,885,000	7			1876	1st	131 1/2	"		704	17,000,000.00		1,532,117.00	562,221.00	7 pr. ct.
4,115,000	6			1876	2d	704	Illinois Central R.R.			17,000,000.00				3 pr. ct.
3,000,000	7			1860	1st mortgage.	72 1/2	Indiana Central...					354,871.00		
600,000	7	Nov. 1,			2d		"							
700,000	7	Jan. & July 1		1862	1st		Iron R.R.		13	123,700.00				
50,000	7				1st mortgage.		Kentucky Cen. 2d Div.		32	166,000.00		23,233.59	14,233.59	
700,000	7				2d		Knoxville & Kentucky...		184	300,000.00		50,274.71	14,149.13	\$8,000
218,000	7			1866	1st	12 35-	Laurens (S. C.) R.R.			2,697,090.00		587,236.57		10 pr. ct.
1,000,000	7			1875	2d		Louisville & Nashville...		26	2,697,090.00			162,277.50	
2,000,000	6			1808	1st	50	Lowell & Lawrence...			1,000,000.00				\$24,000
2,500,000	7			1874	2d		Mad River & Lake Erie...							
2,000,000	7 and 8			1867	1st		Manchester & Lawrence...							
60,000	8			1881	1st mortgage.	32	Marietta & Cincinnati...							
420,000	8			1881	1st	32	Mexican Gulf R.R.		27	600,000.00		237,498.96	162,812.24	7 pr. ct.
321,000	8			1881	1st	32	Milwaukee & Horicon...		15	600,000.00		19,752.42	55,501.74	2 pr. ct. 6m
320,000	6			1884	2d		Mineral Point R.R.		553	922,300.00		7,707,348	3,009,481	3 pr. ct. 6m
6,000,000	6			1869	1st mort. age.		New Haven & Northm'n			23,067,400	14,763,800	7,707,348	3,009,481	
500,000	7	May & Nov.	N. York	1864	Con. till 1859.		New York Central...							
2,356,000	6	June & Dec.	N. York	1873	1st mortgage.	123	N. Y. & Harlem R.R.			5,717,100.00		1,040,593.26	64,878.71	\$37,692.30
8,812,600	7			1863	1st	50	N. Y., Prov. & Boston...		66	1,580,000.00		245,713.00	51,544.40	
3,000,000	7			1863	1st		N. Lon. William'tu & Pal.			1,700,000.00		120,571.50		\$25,000
926,000	6				2d		Pontchartrain R.R.		6	500,000.00		118,735.00	366,118.80	7 pr. ct.
411,700	6			1873	1st mortgage.	62 1/2	N.O., Opelousa & Gr't West.		103 1/2	3,000,000.00		1,007,666.48		
500,000	7			1873	2d		N. Y. & New Havor...							
300,000	6			1855	3d		North Western Va. R.R.							7 pr. ct.
3,000,000	7			1859	1st mortgage.	118	"		19 2	2,000,000.00		600,000.00	23,176.74	58,458.56
419,200	5			1877	1st mortgage.	60	Northern (N. Y.) R.R.			2,111,500.00		304,236.33		2 1/2 pr. ct.
221,800	6			1860	"		North Missouri R.R.							
							Norwich & Worcester R.R.							
							Ogd'nsh'g, Clay'tn & Rome		94			289,690.10	137,875.93	5 pr. ct.
400,000	6			1866	1st mortgage.	88 3-	Ontario, Simcoe & Huron			2,937,500.00		276,539.02		
1,000,000	6			1875	2d mortgage.		Orange & Alexandria R.R.		47	1,500,000.00				6 pr. ct.
300,000	8			1873	1st		Peoria & Bureau Val. R.R.							
300,000	6			1861	1st mortgage.	28 1-5	Philadelphia & Trenton...		47	1,000,000.00				
1,260,000	6			1861 to 1874	1st	76	Potomac & Centocord...		62 1/2	2,400,000.00		68,525.42		
				20 years.	1st mortgage.	86	Potsdam & Watertown...		116	950,000.00				
					1st mortgage.	168 5/8	Rutland & Washington...		26	400,000.00				
500,000	6				1st		St. Louis & Iron Moun. R.R.							
250,000	6				2d		Salem & St. Louis R.R.							
					1st		Sud'sky, Mansp'd & Newk							
					2d		Sullivan Railroad...							
317,000					1st mortgage.	145	Tennessee & Alabama...		73	1,291,450.00		39,586.44		11m. 12 pr. ct.
300,000				1861	1st mortgage.	242	Terre Haute & Richmond			1,000,000.00				
198,000				1840	2d		Toledo, Wabash & Western							
262,500				1875	3d		Troy & Boston...							
2,500,000					1st, 2d, 3d	46	Vicksburg & Jackson...		215	3,000,000.00		322,048.60		2 pr. ct.
500,000	7				1st mortgage.	31	Virginia & Tennessee...		171	165,000.00				
200,000	7				2d		Westchester (Pa.) R.R.							
							Wilmington & Manchester							
							Winchester & Potomac...							
							Worcester & Nashua...							



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

February 20, 1857

Belvidere, Del., guar. 1st mort., conv. ....	@ 88
Chicago & Rock Island, Mort. conv. 1858, ..	—
Cin. Ham & Dayton, 2d mort., ..	— 80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	69 71
Erie, 3d Mortgage, 1883, ..	85 86
" Sinking Fund, ..	85 87
" conv. 1862, ..	79 80
Grand Trunk (Canada) Debenture, ..	81 83
Great Western " conv., ..	118 123
" " non-conv., ..	108 110
Illinois Central, 1st Mort., 7's, ..	91 92
" " with option 70 per cent. shares till Jan. 1858, ..	108 110
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	84 86
Little Miami (1st Mort. not conv. 6's, ..	—
Marietta and Cincinnati, 1st Mort., ..	—
Michigan Central, conv., 8's, 1860, ..	94 95
do do do 1869, ..	91 92 1/2
N.York Central. No Mort. Not conv., 6's 80	81
" conv., 7's, ..	93 95
Ohio and Mississippi, 1st Mort., ..	—
Ohio and Pennsylvania, Income 1872, ..	70 72
Panama. No mort. conv. 1866, ..	—
Pennsylvania, 1st Mort., conv., ..	89 90
" " Sterling, 2d Mort., ..	93 94
Stenheville and Ind., 2d Mort., ..	—

The quotations given are sterling quotations. The American values is to be obtained by adding on exchange generally about 10 per cent.

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending April 8, 1857.

## BONDS.

\$3,000 Indianapolis & Cincinnati R. R. 7 per cent. 2d Mortgage Bonds ....	80 and Int.
2,000 Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds due '66, ..	86
1,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	82
3,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds, ..	50
3,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds, ..	67
1,000 Covington & Lex. R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	72
2,500 Marietta & Cincinnati R. R. Co. 7 per cent. Domestic Bonds, ..	40
6,000 Cincinnati, Wilmington & Zanesville R. R. Co. 7 per cent. Income Bonds, ..	10
2,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. bonds, ..	60
1,000 Indiana Central R. R. Co., 7 per cent. 1st Mortgage Bonds, ..	80
1,000 City of Cincinnati 6 per cent. Bonds	89
3,000 Cincinnati & Chicago R. R. Co., Real Estate Bonds, Milne, Trustee 17	

## STOCKS.

500 Shares Southern Pacific, ..	\$2.00 for \$3 paid.
300 " do do ..	3.25 for 5 "
60 " Dayton & Western, ..	20 and Int.
85 " Indianap. and Cin., ..	64 1/2
10 " do do ..	65
100 " Little Miami, ..	92 1/2
15 " do do ..	92 3/4
50 " Cov. & Lexington, ..	19 "
27 " Cin. Ham. & Dayton, ..	71
10 " do do ..	71 1/2
100 " Cin. Wil. and Zanesville, ..	5 "
100 " Junction (Ind) ..	8 "
25 " do do ..	8 1/4 "
20 " Columbus & Xenia, ..	92
100 " Cin. & Chicago, ..	2 1/2 "

## MONETARY AND COMMERCIAL.

Since our last we have passed the great day of the year, when the notes given at the January settlement have to be paid. This has absorbed the floating means of the merchants, and there probably never was a time when there was so little surplus in the banks, and yet so general promptness in meeting engagements. The banks are doing but little for their customers in the discount line, and there is general complaint of the want of accommodation.

One favorable feature in the market is a reduction in the price of Eastern exchange, and we now quote it at  $\frac{1}{2}$  to  $\frac{3}{4}$  premium. This, together with the fact of the winter payments being over, will soon produce ease in the money market.

At the east we notice a decided improvement in the tone of the money articles. Capital is said to be abundant, and on the increase.

The London Times has an article on American Railroads, which appears in striking contrast with the universal onslaught made by some journals on railroad interests indiscriminately.

Hewson & Holmes, in their circular, say:

In the past week the stock market has been very quiet, the demand for all classes of securities having materially subsided. This has no doubt been mainly, if not altogether, produced by the exceeding stringency in the money market. This growing ease which was generally predicted after the 1st has not been realized, but money matters continue in rather an uncomfortable condition for all classes of borrowers. The condition of money naturally caused a cessation in the demand for stocks; prices have not, however, yielded, but in the few sales that have been made our quotations of last week have been fully maintained. We note small sales of Little Miami shares at 92 1/2 to 92 3/4; Hamilton & Dayton at 71 to 71 1/2; Columbus & Xenia 92; Cincinnati & Indianapolis at 64 1/2 to 65. In the fancied transactions have been very meagre; prices are, however, unchanged.

In Bonds the business has been more respectable, with sales of Indianapolis & Cincinnati 2d mortgage at 80 and interest; Columbus & Xenia Dividend Bonds at 86; Little Miami 6s at 82; Hillsboro' & Cincinnati 1st mortgage at 50; Covington & Lexington 2d mortgage at 67; Ohio & Mississippi 2d mortgage at 60.

The earnings of the Little Miami & Columbus & Xenia R. R. Co., for the month of March were \$99,105 74, an increase of nearly 10 per cent. over the corresponding month of last year.

It is understood that the arrangement between the Little Miami and Cincinnati & Marietta Railroads, by which the latter road secures the use of one of the tracks of the former road from Loveland to this city, for the use of their trains has been finally consummated, and ratified by the stockholders of both companies. The arrangement is regarded as mutually advantageous, and will no doubt prove equally profitable to both companies. The Marietta Company finished their track to Marietta on yesterday. It is understood that the Ohio & Miss. will complete their track so as to give that company an unbroken line from this city to St. Louis, in all, this week. It is now expected that the entire line from Marietta to St. Louis, through this city, will be opened for the regular passage of trains on the 1st of May. This will give, in connection with the North Western Virginia Road, a new line between the east and the west. This important event is attracting in advance a lively interest, and will, no doubt, be inaugurated with imposing and appropriate ceremonies on the part of the three great cities—Baltimore, Cincinnati and St. Louis—more particularly interested, and which will then be brought into close proximity, and into daily intercourse with each other. This line embraces nearly 700 miles of new road, and will be the most important railroad inauguration the country has ever witnessed.

Exchange on New York has given way  $\frac{1}{4}$  per

cent., and the established rates are now  $\frac{1}{2}$  to  $\frac{3}{4}$ . This fact, it is hoped, will give a more liberal supply of currency and an easier money market. New Orleans exchange dull at  $\frac{1}{2}$  discount to  $\frac{1}{4}$  premium.

## New York Stock Sales, April 4, 1857.

\$4,000 Virginia 6's, ..	91 1/2
24,000 Missouri State 6's, ..	83 1/2
5,000 Indiana State 5's, ..	83 1/2
1,000 Erie R. C. Bonds, 71, ..	78
6,000 Harlem R. R. 2d mort. Bonds, ..	74 1/2
22,500 Ill. Cent. R. R. Bonds, ..	90
750 Shares N. Y. Central R. R., ..	68 1/2
100 " Cleveland & Pittsburg, ..	54
1000 " Erie R. R. stock, ..	53 1/2
150 " Panama, ..	93
14 " Chicago & Rock Island R. R., ..	99
900 " Reading, ..	80
150 " Mich. So. & No. Ind., ..	70 1/2
6 " Mich. Cent., ..	94 1/2
125 " Illinois Central R. R., ..	131 1/2
107 " Gatena & Chicago, ..	102
550 " Cleveland & Toledo, ..	72 1/2
325 " Mil & Miss., ..	74
110 " Milwaukee & La Crosse, ..	78 1/2
75 " Indianapolis & Cincinnati, ..	64

## BALTIMORE &amp; OHIO R. R.

The following official statement gives the amount of the principal articles transported from points west into the city of Baltimore during the month of February:

Bark 80 tons; coal 27,224 tons; fire brick—tons; firewood 21 do; flour 53,613 hbls; grain 1,305 tons; granite 60 tons; iron 890 tons; iron ore and manganese 562 tons; fard and butter 1,414 tons; leather 135 tons; cotton 50 bales; wool 183 bales; flaxseed 5 casks; soap stone—tons; lard oil 248 tons; lumber 232 tons; lime 14 tons. Live stock, viz—hogs 4,531 head; sheep 4,750 head; horses and mules 18 head; horned cattle 1,148 head; meal and shorts 76 tons; pork and bacon 3,385 tons; tobacco 773 hbls; whisky 9,543 hbls; miscellaneous 855 tons; hay 52 tons; hemp—hales; flour from Washington Branch 1,837 hbls.

The revenue for the month has been as follows:

	Main Stem.	Wash'n Branch.	Total for both roads.
For Passengers, ..	\$36,958.67	\$24,326.25	\$61,284.92
For Freight, ..	282,433.56	10,680.39	294,114.05
	\$320,392.33	\$35,006.64	\$355,398.97

These results, as compared with the earnings of the corresponding month of last year, show a considerable increase, as will be seen by the following comparison:

	Main Stem.	Wash'n Branch.	Total.
Feb., 1857, ..	\$320,392.33	\$35,006.64	\$355,398.97
Feb., 1856, ..	157,010.28	33,373.35	190,383.73

Increase....\$163,381.95 Inc. \$1,633.29 Inc. \$165,015.24

The annexed table will show the earnings of the road for the first five months of the present fiscal year, as compared with those of the corresponding period of the two previous years:

	1856.	1855.
October, ..	\$471,391.12	\$420,667.49
November, ..	424,758.94	398,190.35
December, ..	466,103.77	438,102.56
	1857.	1856.
January, ..	301,773.29	188,830.78
February, ..	355,398.97	190,383.73

Total.....\$2,019,426.09 1,636,375.92  
1,636,675.92

Increase present year..... \$383,050.17

By the above it will be seen that the increase of revenue for the five months alluded to has been twenty-five per cent. over the corresponding months of the previous year. The revenue for the remaining seven months of last year was \$3,193,796.04, which is also a very heavy increase. If the revenue commenced in the company's receipts for the first five months is continued during the remainder of the year, (and of which there can be no doubt, as they now have the additional advantages of the Parkersburg road), the revenue will reach six millions of dollars.



### LAND GRANTS TO MINNESOTA.

We give below the bill passed by Congress at its last session granting about seven million acres of land to Minnesota for railroad purposes. A previous grant of five million is now in litigation and will probably be decided during the present year. If favorably, Minnesota will have the magnificent donation of *twelve million acres* of land to divide among her incipient roads.

*AN ACT making a grant of land to the Territory of Minnesota, in alternate sections, to aid in the construction of certain railroads in said Territory, and granting land in alternate sections to the State of Alabama, to aid in the construction of a certain railroad in said State.*

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That there be, and is hereby granted to the Territory of Minnesota, for the purpose of aiding in the construction of railroads, from Stillwater, by way of St. Paul and St. Anthony, to a point between the foot of Big Stone Lake and the mouth of Sioux Wood River, with a branch via St. Cloud and Crow Wing, to the navigable waters of the Red River of the north, at such point as the Legislature of said Territory may determine; from St. Paul to St. Anthony via Minneapolis, to a convenient point of junction west of the Mississippi, to the Southern boundary of the Territory in the direction of the mouth of the Big Sioux river, with a branch, via Farrihault, to the North line to the State of Iowa, west of range sixteen; from Winona, via St. Peter, to a point on the Big Sioux River, south of forty-fifth parallel of north latitude; also from La Cresent, via Target Lake, up the valley of Root River, to a point of junction with the last mentioned road, east of range seventeen, every alternate section of land, designated by odd numbers, for six sections in width on each side of each of said roads and branches; but in case it shall appear that the United States have, when the lines or routes of said roads and branches are definitely fixed, sold any sections, or parts thereof, granted as aforesaid, or that the right of pre-emption has attached to the same, then it shall be lawful for any agent or agents, to be appointed by the Governor of said Territory or future State to select, subject to the approval of the Secretary of the Interior, from the lands of the United States nearest to the tiers of section above specified, so much land, in alternate sections, or parts of sections, as shall be equal to such lands as the United States have sold, or otherwise appropriated, or to which the rights of pre-emption have attached as aforesaid; which lands (thus selected in lieu of those sold, and to which pre-emption rights have attached as aforesaid, together with the sections, or parts of sections designated by odd numbers as aforesaid, and appropriated as aforesaid) shall be held by the Territory or future State of Minnesota, for the use and purpose aforesaid; Provided, That the land to be so located shall, in no case, be further than fifteen miles from the lines of said road or branches; and selected for and on account of each of said roads or branches; Provided further, That the lands hereby granted for and on account of said roads and branches, severally, shall be exclusively applied in the construction of that road for and on account of which such lands are hereby granted, and shall be disposed of only as the work progresses, and the same shall be applied to no other purpose whatsoever; And provided, further, That any and all lands heretofore reserved to the United States, by any act of Congress, or in any other manner by competent authority, for the purpose of aiding in any object of internal improvement, or for any purpose whatsoever, be, and the same are hereby reserved to the United States from the

operation of this act, except so far as it may be found necessary to locate the routes of said railroads and branches through such reserved lands, in which case the right of way only shall be granted, subject to the approval of the President of the United States.

SEC. 2. And be it further enacted, That the sections and parts of sections of land which by such grant shall remain to the United States, within six miles on each side of said roads and branches shall not be sold for less than double the minimum price of the public lands when sold; nor shall any of said lands become subject to private entry until the same shall have been first offered at public sale at the increased price.

SEC. 3. And be it further enacted. That the said lands hereby granted to the said Territory or future State shall be subject to the future disposal of the Legislature thereof for the purpose herein expressed, and no other; and the said railroads and branches shall be and remain public high-ways for the use of the government of the United States, free from toll or other charge upon the transportation of any property or troops of the United States.

SEC. 4. And be it further enacted. That the land hereby granted to said Territory or future State shall be disposed of by said Territory or future State only in the manner following, that is to say, that a quantity of land not exceeding one hundred and twenty sections for each of said roads and branches, and included within a continuous length of twenty miles of each of said roads and branches, may be sold; and when the Governor of said Territory or future State shall certify to the Secretary of the Interior that any twenty continuous miles of any of said roads or branches is completed, then another quantity of land hereby granted, not to exceed one hundred and twenty sections for each of said roads and branches having twenty continuous miles completed, as aforesaid; and included within a continuous length of twenty miles of each of such roads or branches may be sold; and so from time to time, until said roads or branches may be completed; and if any of said roads or branches is not completed within ten years no further sale shall be made, and the lands unsold shall revert to the United States.

SEC. 5. And be it further enacted, That the United States mail shall be transported over said roads and branches, under the direction of the Post Office Department, at such price as Congress may by law direct: That until such price is fixed by law the Postmaster General shall have the power to determine the same.

SEC. 6. And be it further enacted, That in case any lands on the line of said roads or branches are within any Indian Territory no title to the same shall accrue nor shall the same be entered upon the authority of said Territory or State until the Indian title to the same shall have been extinguished.

Section seven provides for a grant of land to Alabama.

### LAND GRANTS TO IOWA.

*AN ACT. Supplement to an act entitled an act to accept the grant and carry into execution the trust conferred upon the State of Iowa by an act of Congress, entitled an act making a grant of land to the State of Iowa in alternate sections, to aid in the construction of Railroads in said State, approved May 15th, 1856, which said act of the Legislature of Iowa, was approved July 14th, 1856.*

SEC. 1. Be it enacted by the General Assembly of the State of Iowa. That the said Companies may make such disposition of the lands granted by the act to which this is a supplement, by Mortgage or Deed of trust as may be deemed proper for the purpose of securing any amount of constructive Bonds, necessary for

the construction of such roads; which may bear such rate of interest not to exceed ten per cent. per annum, and may sell the same for the best price that can be procured. Said Companies, nor either of them, shall ever be allowed to plead that such bonds are usurious or invalid. Provided, that the monies realized from the sale of the bonds aforesaid, shall be applied exclusively to the construction and equipment of said roads.

SEC. 2. Any mortgage, or deed of trust made upon the lands, roads or the property of either, shall bind and be a valid lien upon all the property mentioned in such deed or mortgage, including rolling stock; and the purchasers under a trustee sale or fore closure of mortgage, shall have and enjoy all the rights of a purchaser on execution sale: Provided further, that nothing contained in this act shall be so constructed as in any manner to interfere with, change or modify the rights of this State or of the United States, to any lands granted by Congress of this State, and by this State to certain Railroad Companies therein, as a security for the completion of said roads, or to transfer any right in said lands otherwise than as subject to all the conditions imposed by the grant made by the United States to this State and by the grant by this State to said Companies, or by either of said grants; and provided further, that the faith of the State is in no way pledged for the payment of said bonds.

SEC. 3. Any mortgage or trust-deed made as afore mentioned, shall be recorded in the office of the Recorder of each county through which said roads runs, or wherein it owns or holds land, and shall be notice to all the world of the rights of all parties under the same.

**STREET RAILROADS.**—We clip the following from the *London Mechanics Magazine* relative to street railroads.

The common double T rail used on the narrow gauge railways is 5 ins. in height, and 2½ ins. in width. In practice, the wheels of the locomotive with six tons dead weight on them, abrade the upper surface, while the lower surface is damaged in the chairs. But the side channels remain intact. He therefore proposes to take the rails and lay them down flat, bolting them at the joints to a block of cast iron through the fish bolt holes, the same block being provided with a horizontal hole, in which is received a tie or gauge bar, connecting the two opposite rails together. In the channels of these rails the ordinary omnibus wheels can run, and, supposing the gauge the same, ordinary railway waggons could run equally well, the wheels running on their flanges instead of their tracks. As dirt may get into it, a spring scraper may be attached to the vehicle; or smart lads from the red or blue shoe brigade might be selected and provided with a crooked stick each to patrol the line. Ordinary omnibuses running on these rails would be in no difficulty: they can easily be turned out of the rail channels, without points and crossings, or any expensive paraphernalia. There is another rail also well adapted to the same purpose, and possessing greater lateral and vertical strength for this purpose,—the bridge rail. For street and road purposes it has to be reversed, with the groove above, resting on the bottom and the side flanges. The wheels to run on this kind of rail will require flanges in the center of the breadth of the tyre. A spring scraper will keep the grooves clean, or a boy can be employed. All the other arrangements will be the same as with the double T rail.



# The Great Arnold Secret Discovered at Last!

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



For Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**—For Ledgers and Records only. **MERCANTILE**—For Books, Letters, and General purposes. **COPYING**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana; and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.  
Or SUMNER SMALL, Boston, Mass.

### Thorough Bred Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

### SHORT HORN BULL, "TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

T. WRIGHTSON.

### TO PRINTERS.

### Large Cylinder Hoe Press FOR SALE.

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once.

Address WRIGHTSON & CO.,  
167 Walnut street, Cin'ti, Ohio.  
N. R. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.

ap8-1m W. & CO.

### ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLKT, Jr., Civil Engineer.  
No. 298 H Street, Washington, D. C. apr12

### FOR SALE.

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold out for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

ap8-1m WRIGHTSON & CO.,  
167 Walnut street, Cin'ti, Ohio.

### SILVER, GOLD, LEAD,

And Other Minerals.

ON THE PROPERTY OF THE

### Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United-States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,

Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O:

### Norris' Locomotive Works.



PHILADELPHIA.

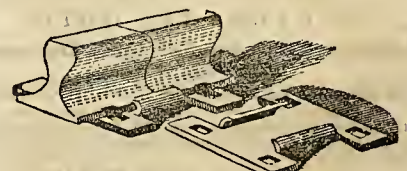
ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy.27.

RICHARD NORRIS & SON.

### RAILROAD SPIKES.



WROUGHT IRON

### Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT AND CAST CHAIRS, AND FASTENINGS, BOILER RIVETS BOLTS, SHIP AND BOAT SPIKES, &c. &c.

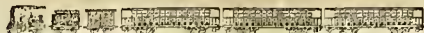
The best quality of refined iron is used, and all orders filled with dispatch. J. HOPKINSON SMITH,

No. 26, South Charles st.

Please direct the name in full.  
Baltimore August 31st



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12:30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6:30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton

IF A Steamer leaves Racine for Chicago every evening at 10:30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President,  
ROBERT HARRIS, Ass't Sup't. aug14

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



### Manufacturers of all kinds of Railroad MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

### BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## WASON'S CAR MANUFACTORY, Near the Pittsburgh R. R. Shops, CLEVELAND, OHIO.

Passenger, Baggage, Freight, Dumpers, Hand Cars, &c.,

Of the best quality in all respects, style, workmanship and material, made to order with promptness.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction to all cases.

CHARLES WASON,  
Late of the firm of T. & R. Wason, Springfield,  
Massachusetts. +oc20.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mill Drills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
fe37 LEE & LEAVITT.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

### VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connecting through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [jan1-1y] Agent.

## PRATT & FREEMAN.

### PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Caudlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Truck Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-1y

## E. MENDENHALL, MAP, BOOK & PRINT SELLER,

Has constantly on hand  
GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

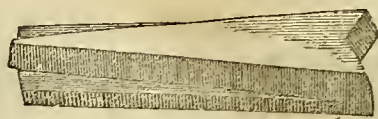
Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES, DRAWING INSTRUMENTS, &c.

Publisher of the  
Railway Map of the Western States,  
In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON CO. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

MAPS OF EVERY DESCRIPTION.  
mh22

## Important to Railroad Companies, etc.



### Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

### RAILROAD FROG-POINTS,

Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Kecker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'tl.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

### ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of Locomotives, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN and NOT E METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles CHAS. W. COPELAND, Consulting Engineer,

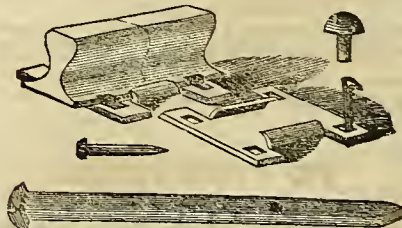
64 Broadway, N. Y.

## W. G. ATKINSON, Civil Engineer, Surveyor & Draftsman, CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mar1-1y

## GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.  
feb 28 CORBY, GOSSIN & CO.



## Most Direct Route to the East.

BALTIMORE AND OHIO  
RAILROAD.From Wheeling to Baltimore and  
Washington City, D. C.MAKING DIRECT AND CERTAIN CONNECTIONS WITH  
PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting  
lines) now offers the fullest advantages to travelers be-  
tween all parts of the West and the larger Eastern  
cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASH-  
INGTON CITY, BALTIMORE, PHILADELPHIA and  
NEW YORK, thus giving the Western merchant the  
range of the Baltimore, Philadelphia and New York  
markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars  
of the Little Miami Railroad Express Train, at 6 A. M.,  
10 A. M., or 6 P. M., for Columbus, connecting there  
with the Central Ohio Railroad through Newark and  
Zanesville, for Bet Air, on the Ohio, four miles from  
Wheeling. From this place the connection with the  
Baltimore and Ohio Railroad is made direct. By the  
Express Train of this route, the time from Cincinnati  
to Baltimore is but 26 1/2 hours, and to Washington is but  
27 1/2 hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2  
Burnet House, second door west of Vine street; No. 177,  
Gibson House Building, and old office, southeast corner  
of Broadway and Front street, opposite the Spencer  
House; or at the Eastern (Little Miami) Depot, East  
Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and  
Baltimore and Ohio Railroad.Baggage checked through from Cincinnati to Bal-  
timore.FREIGHTS.—With the largest equipment of any rail-  
road in the United States, the road is prepared to do an  
immense business in the transportation of freights,  
which are carried with care and dispatch, and at rates  
as low as those of any other first class line. For particu-  
lars see freight tariff, copies of which may be seen at  
any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT TERRE HAUTE with the EVANS-  
VILLE & CRAWFORDSVILLE, and the TERRE  
HAUTE & ALTON RAILROADS.Trains leave Union Station, at Indianapolis, daily,  
Sundays excepted, as follows:

## MAIL TRAIN.

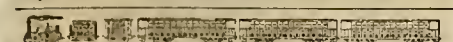
Leaves Indianapolis at 11:40 A. M., (after the arrival  
of the trains from Cincinnati.) Arrive at Terre Haute  
at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the  
Evansville & Crawfordville Railroad, for Vincennes,  
Evansville, Cairo, and St. Louis. Or by the Terre  
Haute & Alton Railroad, at 3:40 P. M., for St. Louis,  
Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples,  
La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre  
Haute at 11:52 P. M.; making connections with the 12:30  
A. M. trains of the Evansville & Crawfordville and the  
Terre Haute & Alton Railroads, for the West and  
South, as above.

E. J. PECK,

Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.

MANUFACTURERS of the Patent India Rubber Car  
Springs, and of the best quality of Vulcanized Rub-  
ber Hose, Engine, Hydrant, and Conducing. Sold at  
wholesale at great discount from list prices.

oc23-2m

CHARLES L. NOBLE, Agent.

1856.

LITTLE MIAMI  
AND COLUMBUS AND XENIA

## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING.

PITTSBURGH.

DUNKIRK.

BUFFALO.

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline,  
and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8 1/2 "
To Dunkirk in.....	14 1/2 "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville  
and Wheeling Lightning Express, leaves Cincinnati at 6  
o'clock A. M., for all the Eastern cities.Also, Detroit, via, Cleveland, Springfield, Wilming-  
ton, Circleville, Lancaster, Zanesville and the East;  
Chillicothe and Athens. Passengers by this train for  
Lake Steamers have the afternoon at Cleveland. This  
train stops between Cincinnati and Columbus at Love-  
land, Morrow, Xenia and London only.SECOND TRAIN.—Cleveland, Pittsburgh and Wheel-  
ing Express Mail, leaves Cincinnati at 10 o'clock A. M.,  
for all the Eastern cities. Passengers by this train for  
Lake Steamers make direct connection. This train  
stops at all points between Cincinnati and Columbus.THIRD TRAIN.—Accommodation, leaves Cincin-  
nati at 3:30 o'clock P. M., for Springfield, Wilmington,  
Circleville, Lancaster, and Zanesville; Chillicothe; and  
Hillsborough. This train stops at all points between  
Cincinnati and Springfield.FOURTH TRAIN.—Cleveland, and Pittsburgh Night  
Express, leaves Cincinnati at 6 P. M., via, Cleveland,  
and Pittsburgh, for all the Eastern cities. This train  
stops at all points between Cincinnati and Columbus.One Train on SUNDAY, at 2:30 o'clock P. M. for  
Columbus.Trains run by Columbus time—7 minutes faster than  
Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at  
Little Miami and Covington and Lexington offices, No. 2  
Burnet House, second door West of Vine street; No. 177,  
Gibson House Building, and Old Office, south-east  
corner of Broadway and Front streets, opposite Spencer  
House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each  
and every train. By leaving directions at either of the  
above offices, they will call for passengers in all parts  
of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

TO LOUISVILLE  
IN SIX HOURS.Change of time for Indianapolis, Chicago, and all  
the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 15TH, AND UNTIL FU-  
ther notice, the Trains will depart from Mill street  
station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45

P. M.

Freight.—For Louisville, Indianapolis, Peru, Chicago,  
Terre Haute, Vincennes, Evansville, and all interme-  
diate stations, at 5:30 P. M.For further information in regard to Freight, apply  
at the Station on West Front, near foot of Columbia  
Street.For TICKETS apply at offices, No. 2 Burnet House;  
Station on West Front Street, or to the offices of the  
Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Om nibuses run from the principal hotels, and  
call on orders left at the Ticket Offices.Om nibuses for 5:45 P. M. train will leave Gibson  
House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan 2

1856.

1857.

Spring Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST.

## FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8  
A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chi-  
cago, Galena, Rock Island, Terre Haute, Dubuque, St.  
Paul, and all the principal cities and towns North,  
South and West of Indianapolis.Passengers can now go by this route with far  
more comfort and safety than by any other, and through  
in as quick time.

## NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chi-  
cago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M.,  
connects at Urbana with Columbus and Piqua trains  
East and west; at Bellefontaine for Crestline, at Sand-  
usky for Toledo and Chicago going west, and at Clyde  
or Sandusky for Cleveland, going east, running into  
the C. C. & C. LAKE SHORE DEPOT, avoiding any  
ferrying or omnibus riding, and connecting at Cleveland  
withLAKE SHORE TRAIN,  
For Dunkirk or Buffalo, to New York, Detroit, Niag-  
ara Falls, and all the Eastern cities. Also connects at  
Sandusky with

## "STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michi-  
gan Road to Troy, Piqua, Sidney, &c. Also, with Green-  
ville & Miami Road to Greenville, Union, and all points  
on the Bellefontaine Road; and at Hamilton with  
Western Stage Co.'s four horse Coaches for Oxford,  
Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and  
Pittsburg.

## THIRD TRAIN.

At 2:10 P. M. for Indianapolis and Dayton, connect-  
ing at Hamilton for Eaton and Richmond; through to  
Indianapolis direct, there connecting with night trains  
for St. Louis, Chicago, &c.Connects at Dayton with train for Troy, Piqua, Sidney  
&c. Also, with train on Mad River Road for Spring-  
field, Urbana, Bellefontaine, Huntsville, and interme-  
diate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, For-  
t Wayne and Chicago, connecting at Forest direct for Ft.  
Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30  
A. M., and Chicago 2:00 P. M., also connects at Forest  
for Pittsburg Philadelphia, &c. Same train connects at  
Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P.  
M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:30 A. M., 12:05 M. and  
6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M.

For further information and Tickets, apply at the  
Ticket Offices; on Walnut street, near Fourth, or at  
the South-East corner of Fourth and Vine streets or at  
the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving  
their names at either of the Ticket Offices. dec 21

## PERU &amp; INDIANAPOLIS R. R.

Peru, Logansport, Wabash, Rochester, and  
Indianapolis.Passenger Train leaves the Union Station at Indian-  
apolis daily, Sundays excepted, at 10 o'clock P. M., after  
the arrival of the Trains from the West, South, and East  
arrive at Peru at 5:45 and 6:15 P. M.Leaves Peru daily, Sundays excepted, at 6:00 A. M.  
for Indianapolis, connecting with all Trains for the  
South, East, and West.Trains going North connect with the Toledo, Wabash  
and Western Road for Lagro, Huntingdon, Wabash,  
and Toledo; also Logansport and Lafayette.Passengers coming South from T. W. & W. R. R.,  
make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

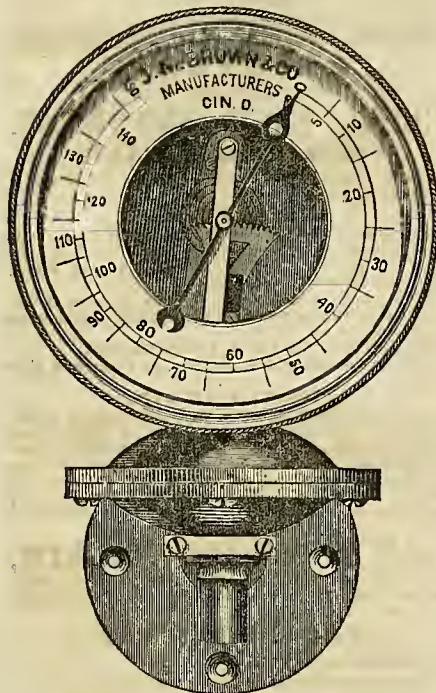
L. N. ANDREWS, Gen. Fr'ght Ag't.  
Indianapolis, Sept. 16, 1855.

[mh29-1y.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR

### LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

mar26

250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

### DRILL THE TUBE-PLATES

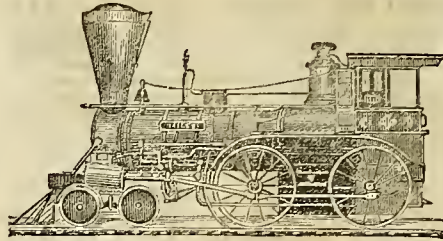
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Ties, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER &amp; SON,

82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI,

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c., &c.

Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping puts in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON &amp; CO.

New York, Ap 3, 1856. 9 South William Street.

### A. B. LATTAS

### Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

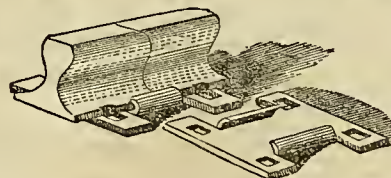
apl7

A. B. &amp; E. LATTAS.

J. D. GREEN.

C. S. GREEN.

### CINCINNATI RAILWAY



### CHAIR WORKS,

ESTABLISHED JAN., 1852.

south Side Congress St., East of Canal, CINCINNATI, OHIO.

J. B. GREEN &amp; BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

Feb. 14 1y.

J. B. GREEN &amp; BRO.

### THE SCHENCK MACHINERY DEPOT

AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

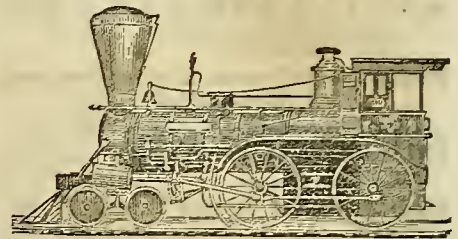
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE &amp; RICHARDSON.

## Railroad Car Findings

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, and Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS.

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

### Cotton Duck for Car Covering,

Of any required width to 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows, Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws, Brass and Silver plated Trim-  
mings for win dows and Seats. Varnish, Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.  
Silver Belts and White Metal Letters. Engine and  
Signal Belts, anti-friction or Babbitt Metal.

### Portable Leiges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIGES.

Late Davenport & Bridges. Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.  
foc6.

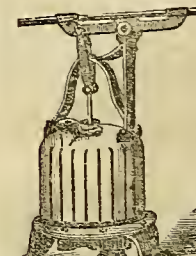
## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

## Sole Manufacturers of McGowan's Double Action SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturers, Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

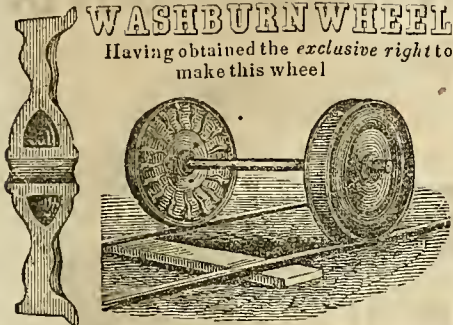
SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855 1



**FULTON CAR WORKS,**

CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

**MUSKINGUM WORKS**  
ZANESVILLE, OHIO.

**DOUGLASS, SMITH & CO.**

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

**CAR WHEEL.**

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

**WASHBURN WHEEL,**

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Arc now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
jan1. Muskingum Works, Zanesville, O.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL

**DAVENPORT, RUSSELL & CO.,**

**Railway Car Manufacturers,**  
**MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16\* **JOSEPH DAVENPORT.**

**S. C. THOMSON & CO**  
MANUFACTURERS OF

**PATENT PAD LOCKS,**

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,

1 n24 **NEWARK, N. J.**

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or  
Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855.**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

**ALBERT N. LEA,**  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS.  
190 Water Street New York.

**RAILROAD MAP OF UNITED STATES**  
NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

**RAILROAD IRON.**

500 TONS best quality Welsh Rails, 56 lbs per lineal rail, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July31

**THOMAS D. STETSON,**  
**Mechanical Engineer,**

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.  
Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written. Opinions of Inventions. Important aid in bringing out Inventions. oc23

**The Kentucky Military Institute.**

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

**P. DUDLEY,**  
President of the Board.

**RAILROAD IRON.**

1500 TONS best quality Welsh Rails, "Erie" pattern, 56 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** feb19-1m 9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

**THEODORE DEHON,**  
no13 10 Wall st., near Broadway, New York.

## IRON BOILER FLUES, PASCAL IRON WORKS.

**MORRIS, TASKER & CO.,**  
Manufacturers of

**LAP-WELDED BOILER FLUES,**  
1 1/2 to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA. aug

**RAILROAD IRON.**

**LOCOMOTIVES.**  
4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

**A. H. GOODMAN & CO.,**  
Feb. 7, '56-2m.1 No. 7 Wall st., N.

**RAILROAD CAR**

AND  
**COACH TRIMMINGS.**

**DOREMUS & NIXON,**

No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**

**IMPORTERS**

OF  
**Plain and Figured Mohair Plush,**

Printed and Unprinted, Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**

**Enameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width.**

Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT.**

**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in bond for exportation.  
sep18 **DOREMUS & NIXON.**

**RAILROAD RECORD,**

**BOOK & JOB PRINTING OFFICE,**

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,  
**RAILWAY AGENTS**  
AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 2d street, N. Y.

T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

Patent Self-Adjusting Lantern!  
THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

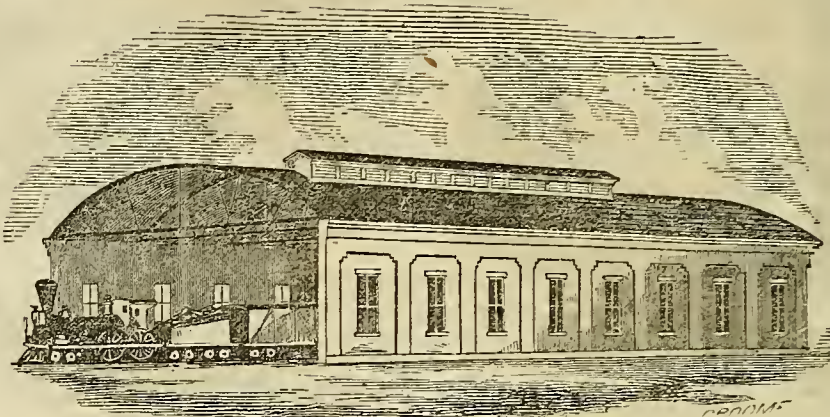
BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-ly 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



Office, No. 57 West Third Street,  
CINCINNATI, OHIO.

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of Iron Supporting now in use, and no more than good wooden Trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

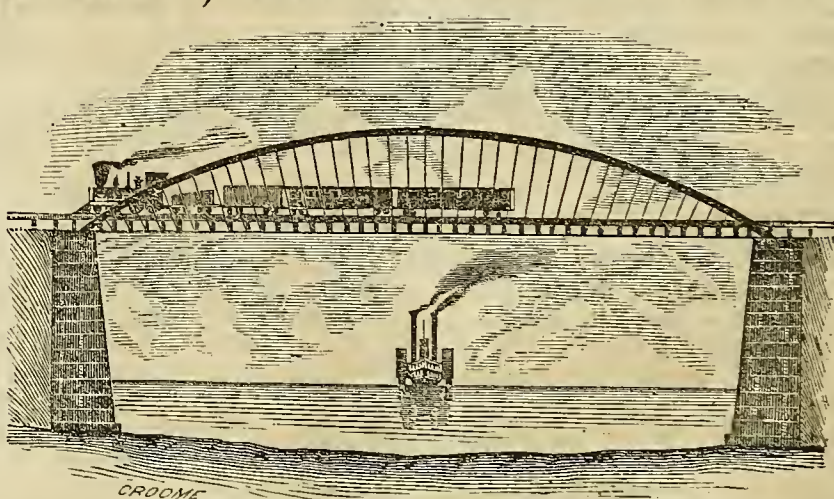
January 1st, 1856.

MOSELEY, WINSTON & MOSELEY.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *plate iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by *responsible obligations*.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

THOS. W. H. MOSELEY.

Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING.....APRIL 16, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS—	
One square, single insertion .....	\$1 00
“ “ per month.....	3 00
“ “ six months.....	12 00
“ “ per annum.....	20 00
One column, single insertion .....	4 00
“ “ per month.....	10 00
“ “ six months.....	40 00
“ “ per annum.....	80 00
One page, single insertion .....	10 00
“ “ per month.....	25 00
“ “ six months.....	110 00
“ “ per annum.....	200 00

Cards not exceeding 4 lines, \$5 per annum.  
Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers, and Proprietors,

### CONTENTS.—NO. 8.

#### EDITORIAL.

South Western R. R., Tenn.....	113
Russian Physical Civilization—Railroads.....	113
The Desjardins Accident.....	114
Brevities.....	114
Grand Rapids & Indiana R. R.....	114

#### RAILROAD DAQUERREOTYPES.

Belvidere & Delaware R. R.....	115
Flemington R. R.....	115

#### RAILROADS.

Cincinnati & Fort Wayne R. R.....	115
Milwaukee & Beloit R. R.....	116
Grand Rapids & Indiana R. R.....	117
New Orleans & Opelousas R. R.....	122
Memphis & Charleston R. R.....	122

#### MISCELLANEOUS.

The Stump House Tunnel on the Blue Ridge R. R.....	116
Wagon Road to California.....	122

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	120
London Quotations.....	121
Cincinnati Stock Sales.....	121
Monetary and Commercial.....	121
Sales at the New York Stock Board.....	121

**SOUTH WESTERN R. R., TENN.**—This road is designed to run from Danville, Ky., to McMinnville, in Tennessee. A single glance at the map will show the important position it occupies with reference to the great chain of railroads running from Cincinnati south: crossing a section of country that is forever barred from navigation, yet healthy and fertile, with all the elements of agricultural prosperity, it must in time be a local road of much strength; while, as a link in the great chain binding the commercial center of the Union with that portion lying south of us, its prospects for business will be, to say the least, average.

We are pleased to learn that the road is located 40 miles, and surveys made to the Kentucky State line. The contract has been taken by a gentleman of wealth and energy, and a fair force is already at work.

### RUSSIAN PHYSICAL CIVILIZATION—RAILROADS.

If we go back to the early history of railroads we shall find much that is interesting. It is our purpose to commence the history of railroads in America at a future time, and show who were the early founders and advocates of this now prodigious development of the power and progress of locomotion. At present we will refer briefly to the first railroads of Russia. Perhaps no country on earth so much needs extended highways, or powerful means of locomotion, as Russia. It has the most extensive surface of any country, and lies so far north, that its great water courses are frozen half the year. If Russia is ever to be a really great country, commercially and financially, she must extend her lines of intercommunication to a far greater extent than they now are. The most enlightened of the Russian Princes have seen this necessity, and endeavored to supply this defect. Peter the Great saw this necessity, and introduced canals. Alexander I. introduced artificial roads. He commenced the turnpike road from St. Petersburg to Moscow, which was finished by his successor, Nicholas. But in the time of Nicholas railroads began, and the effect of such works did not escape him. It so happened that the Chevalier Von Gestner, who was concerned in the first Austrian railways, visited Russia in 1834, for the purpose of examining the mines and factories. After he had finished his tour he was presented to the Emperor. Nicholas then expressed himself strongly in favor of Russian railways, and of the advantage they would be to the country; and also offered extraordinary privileges to the first companies. Von Gestner proposed, by way of beginning, two short lines out of St. Petersburg, and received the exclusive privilege of constituting companies for that object. When the books were opened for subscriptions, the demand was so great that the first 15,000 shares necessary to the object were subscribed for immediately.—These shares were 200 bank note rubles (about \$100) each; which made the capital about \$1,500,000. Eight days after the grant was made the Chevalier set out for England and Belgium, to order rails, engines, carriages, and other railway machinery, as they could not be obtained in Russia. The procuring of these materials then (1836) was very difficult; for the railroad excitement had just commenced in England and America, and iron had risen 40 per cent. in a twelvemonth. Six locomotives were made in England, which were delivered in St. Petersburg at about \$8,000 each.

The work on this road was commenced on the 9th of May, 1836, and was finished (20 miles in length) in 1837. In November, 1836, the first 4½ miles were opened, and the anxiety to attend the railway excursions was so great that, notwithstanding they had to come

19 miles to get to it, yet on the 24th of January, 1837 (for example), there were 1,838 passengers.

It is quite curious that in a country such as Russia, and with so great an innovation before them, no obstacle or objection was put in the way of the project; but, on the contrary, the road was as popular as successful.

The St. Petersburg & Pawloski Railroad was about 20 miles long, 5 feet grade, and 6 feet gauge. When this road was first run, the charge was \$5 per passenger, or 20 cents per mile! The consequence was that 200,000 persons passed between Pawloski and Zenkoe-Selo in private conveyances.

For many years railroads progressed very slowly in Russia. There was no comparison between the work done in Russia and that in England; still less with that in the United States; yet it is quite obvious that Russia needs railroads more than the United States. Soon after the work of which we speak, the Emperor Nicholas planned the great railroad from St. Petersburg to Moscow. This is 700 Russian *verssts*, or something like 650 miles in length. When this work was first undertaken, the Emperor employed Capt. GEORGE WHISTLER, an officer of American Topographical Engineers, as the Chief Engineer. Whistler graduated at West Point in 1819; was a fine draughtsman, and subsequently engineer. He became engaged in railroad constructions, and acquired great credit in them. The Emperor offered Whistler \$18,000 per annum, all his expenses, and perfect command of the works and men. It was accepted, and Whistler had great success, but died before the work was completed. He had to employ many Americans, Englishmen and Germans, as mechanics and laborers. He found the Russian officers in the habit of *whipping* the men under them. He told the Emperor this would never do; the men would not work. The Emperor compromised the matter. He said the foreigners should be governed just as Mr. Whistler chose, but that the Russians should be whipped, for they were *used to it*! Mr. Whistler used absolute command over his men and works. He had 5,000 people employed, and the road went on well. The locomotives were mostly made in the shops of Norris & Co., Philadelphia.

After the death of Whistler, Major Thompson, an American officer, was appointed Chief Engineer. The work is, we believe, now finished. Recently the present Emperor has had a consultation of ministers, officers, and men of science, in reference to an extended system of railroads for that country. The Crimean War has taught that country a great lesson. Had there been a line of railroad from Moscow to the Crimea, the whole force of the Russian Empire might have been concentrated at Sebastopol. The disasters of the war would have been avoided, and the



English and French would have been contented to have blockaded the Russian ports. It is probable Russia will engage in no great war till the railroad system is complete.

#### THE DESJARDINS ACCIDENT.

The coroner's jury in the case of the above accident have rendered the following verdict.

1st. That the persons aforesaid being passengers and servants of the Great Western Railway company, came to their death in consequence of the Company's locomotive engine, *Oxford*, and tender, with a baggage car and two first-class passenger cars attached, comprising the train leaving Toronto for Hamilton, at 10 minutes past 7 o'clock, in the afternoon of the 12th day of March last, having been precipitated into the Desjardins canal by the breaking of the swing bridge over said canal.

2nd. The jurors find that the immediate cause of the accident was owing to the breaking of the forward axle of the engine truck close to the wheel on the right, at a point on the road not ascertained, and in consequence of which the left forward wheel of the truck left the rail at or near the switch near the said Desjardins Canal Bridge, causing the locomotive when entering on the bridge to diverge to the right, crushing and tearing away the support—precipitating the whole train in the canal, and resulting in the calamity which forms the subject of this melancholy inquiry.

3d. The jurors further find that the said locomotive *Oxford* had recently undergone a thorough repair, and six days previously to the melancholy occasion, according to the evidence, had been turned out of the repair shop in a satisfactory condition. They likewise find that before leaving the Toronto station with the train on this fatal trip, the said engine was examined by the proper officer and reported by him to be in perfect order.

4th. The Jurors aforesaid also find that the said bridge over the Desjardins Canal was built of wood and constructed of sufficient strength for the conveyance of the traffic of the line safely and securely over the said bridge; provided that the locomotive and cars remained on the railway track, but that the said bridge was not built of sufficient strength to sustain an engine and train in case they should run off the track while passing over the said bridge.

5th. The Jurors aforesaid are of opinion that the only certain way of providing against a similar catastrophe at the same place would be, by the erection of a permanent bridge, and they would, therefore, strongly urge on the Government to cause the same to be built forthwith, and also that the Toronto and Great Western lines should have separate tracks over said construction, thereby doing away with switches, which are always objectionable in such places.

6th. The Jurors would further recommend the renewal of the former law compelling all trains to come to a dead stop before passing over this and all similar bridges, believing, as they do, that this lamentable accident might have been avoided, had this precautionary measure remained in force.

The last clause is in our opinion the most important one in this horrible case. The bridge in this instance was a swing bridge and although amply secure while the train was on the track was utterly incapable of sus-

taining the shock of a twenty-five ton locomotive leaping from beam to beam at the rate of twenty miles an hour. Indeed we can hardly conceive of a structure, permanent or movable, that would be capable of standing such a test. Nothing short of slow speed in approaching a bridge of this character will render its passage safe. In taking this ground we know that we are advocating a system that is decidedly unpopular with the operators of railroads and especially so with engineers. It is too much trouble for them to stop their trains *uselessly* (?) at every bridge, they cannot make the time required, they have crossed safely a hundred times before—they *can see that all is right* (?) just as well when moving at twenty miles an hour as at five; these and a thousand other excuses equally plausible, yet frivolous and unfounded are urged against a precautionary measure demanded by public safety. With how much force does the single argument offered by such calamities as those of Norwalk and Desjardins rebut these specious pretexts. Sixty lives offered up as a sacrifice to an ease loving spirit, a spirit that says spare me the trouble of moving the throttle valve—is the terrible consequence of yielding to the misguided clamors of those who should know the importance of such a regulation.

We trust that this will be the last of these, we had almost said wilful, certainly culpable accidents! Every consideration of interest and humanity would dictate the course of safety. And the severest penalties should be affixed to a violation of such a course.

#### BREVITIES.

—OHIO & MISSISSIPPI R. R.—The last rail was laid on this great work on Wednesday of this week. The road is now open its whole length, and will form an avenue of trade the importance of which cannot be over-estimated.

—LEXINGTON & DANVILLE R. R.—Thirteen miles of iron for this road has arrived at Covington.

—PENNSYLVANIA R. R.—The supplement to the charter of this company passed by the Legislature of Pennsylvania, authorizing the company to construct a railroad from the terminus of the Philadelphia & Columbia R. R. to some suitable point on the Delaware river, was accepted on April 6th by the stockholders of the company, by a vote of 6,221 shares against 950.

—NORTHEASTERN R. R.—The Charleston *Mercury* says: "The accomplished and intelligent President, Col. Huger, it will be seen, has resigned his office, and Col. MacFarland, of Cheraw, has been appointed by the stockholders to fill his place. This latter gentleman is already the President of the Cheraw & Darlington Road, whose affairs he has managed with great ability and success. His appointment to the Presidency of the

Northeastern Railroad virtually unites the two; and we think this election on the part of the stockholders was a happy one, and affords just ground of confidence that the road will be pushed through to its completion in the shortest possible time. It is expected to be finished to its connecting point with the Cheraw & Darlington Road in season for the next crop."

—THE BLUE RIDGE R. R.—We are gratified to learn that the private subscriptions to this great enterprise are now sufficient to secure the second installment of the State subscription. The road from Anderson to Pickens is now ready for laying down the iron, and this part of the work will be speedily completed. The remaining portions of the road will be hereafter prosecuted with vigor; and we consider its completion as now placed beyond doubt. In after years, the men who have so laboriously, at the sacrifice of private interest, and in spite of discouragements, carried forward this great work, will be remembered gratefully by the citizens of Charleston, who will be enriched by the result of their patriotic exertions.

#### GRAND RAPIDS & INDIANA R. R.

In another place we copy entire from the *Sturgis Republican* an article in which the plan and prospects of this road are fully represented. We trust our readers will consider the subject of a grand trunk line through Cincinnati, from the extreme north to the extreme south of our country, one of sufficient national importance to justify the exercise of all our influence in its favor. It has been with us for years an object to secure this grand axial line; and now that we see before us the almost certain realization of our hopes, we cannot refrain from giving our readers the fullest information we possess.

With regard to the strictures of the writer on our previous article, we would simply say that we have endeavored to make amends for the former hastily prepared wood cut by a larger and fuller one. As to the item of cost, we were aware that the estimates for the road were \$25,000 per mile; but our object was to show that, even at the maximum cost of roads in this country, the two roads in Michigan had an ample basis for their construction in the munificent land grants of Congress. As to the Amboy, Lansing & Traverse Bay R. R., we beg to assure the writer that we have no more interest in the one project than in the other. It commences, however, very near the center of the southern counties, and preserves its central character nearly to Saginaw, from which point it may strictly be considered an eastern counties' line. With these remarks, we refer the reader to the able article already mentioned. We have furnished the text, and we now invite the attention of our readers to the discourse founded upon it.



## Railroad Duplicatures.

No. LXXIV.

### BELVIDERE & DELAWARE R. R.

The report of this road is dated March 27, 1857. The following are its officers:

President—CHARLES SITGREAVES, Phillipsburg, N. J.

Secretary and Treasurer—JOHN P. STOCKTON, Princeton, N. J.

Superintendent—ASHBEL WELCH, Lambertville, N. J.

#### DIRECTORS.

SAMUEL D. STRYKER,

CHARLES BARTLES,

LEWIS PERRINE,

WM. P. ROBESON,

E. A. STEVENS,

Com. R. F. STOCKTON,

JOHN R. THOMSON,

CHARLES SITGREAVES,

RICHARD STOCKTON.

The ANNUAL MEETING of the stockholders is held in July.

The CAPITAL STOCK is as follows:

Number of shares.....20,000.

Capital.....\$1,000,000.

#### RUNNING EQUIPMENTS.

Number of Locomotives.....13.

Passenger cars, 1st class.....16.

Baggage ".....3.

Express, ".....1.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends Dec. 31:

	1854.	1855.	1856.
Passengers.....	\$72,172 56	\$79,836 17	\$96,799 17
Freight.....	48,621 48	66,639 92	81,344 44
Coal.....			47,692 48
Mails.....	1,109 27	3,240 45	2,546 61
Express.....	950 00	1,158 75	1,688 70
Miscellaneous.....	3,332 25	4,468 52	11,190 50
Cost of operation....	\$70,129 91	\$91,624 84	\$132,458 17

#### DETAILS OF CONSTRUCTION.

Length of road.....	64 miles.
Termini.....	Trenton and Belvidere.
Gauge.....	4 feet 9 $\frac{1}{2}$ inches.
Single track.....	64 miles.
Sidings.....	8 "
Length of rail-bars.....	Various.
Weight per yard, rail.....	50 to 60 lbs.
Kind of iron.....	American and English.
When laid.....	1851 to 1855.
Ties.....	Oak and Chesnut.
Length.....	8 feet.
Size.....	6 by 6 inches.
Ballast used.....	Broken Stone & Gravel.
Kind of fuel.....	Wood and Coal.

No. LXXV.

### FLEMINGTON R. R.

President—CHARLES BARTLES, Flemington, N. J.

Treasurer and Secretary—A. V. BONNELL, Flemington, N. J.

Superintendent—ASHBEL WELCH, Lambertville, N. J.

#### DIRECTORS.

ALEX. WURTS,

WM. P. EMERY,

JOHN G. READING,

HUGH CAPNER,

CHAS. BARTLES,

Com. R. F. STOCKTON,

E. A. STEVENS,

JOHN P. STOCKTON,

BENJ. FISH.

The road is run by trains of Belvidere & Delaware R. R. Co.

The following are the results of operation for the years 1855 and 1856. Fiscal year ends Dec. 31:

#### RECEIPTS.

	1855.	1856.
Passengers.....	\$4,846 62	\$5,693 17
Freight.....	3,893 83	5,759 22
Coal.....		222 01
Mails.....		193 29
Cost of operation.....	\$8,700 00	\$10,521 70

#### DETAILS OF CONSTRUCTION.

Length of road.....	12 miles.
Termini.....	Lambertville and Flemington.
Gauge.....	4 feet 9 $\frac{1}{2}$ inches.
Single track.....	12 miles.
Sidings.....	1 "
Weight per yard, rail.....	50 lbs.
Kind of iron.....	American.
When laid.....	1854.
Ties.....	Oak and Chesnut.
Length.....	8 feet.
Size.....	6 by 6 inches.
Fuel.....	Wood.

FIRST LOCOMOTIVE IN GEORGIA.—The honor of building the first locomotive made in Georgia is due to the Messrs. Noble, of Rome, Ga.

## Railroads.

### CINCINNATI & FORT WAYNE R. E.

We are in receipt of the Annual Report of this company, dated February 24, 1857, and, as it possesses the merit of brevity, shall give it entire. The Report says:

"At the commencement of the year just closed, the Directors charged with the management of your interests in this company made every exertion within their power to increase the subscription to the capital stock, to an amount which would, when added to the amount of resources unexpended, complete the graduation of the road from Richmond north to Camden. The amount stated at the time, as necessary to be raised for that purpose, was seventy thousand dollars; fifty thousand of which it was proposed to secure and expend between Richmond and Winchester, and twenty thousand between the latter place and Camden; and no subscription, as a part of either sum, to be binding, unless the whole of such sum be subscribed. Stockholders and others interested in the building of the road were called together during the month of March, at Winchester, Lynn, Newport and Richmond, and a few weeks later at New Mt. Pleasant and Camden. The attendance on these occasions was slender. Those present, however, were addressed by the officers of this company, and their interest in the enterprise pointed out; the condition and plans of the company were fully explained, and they were urged to aid in raising the desired amount. Books were opened and agents appointed, who for several weeks afterwards

were engaged in the effort to obtain subscriptions, but all to no purpose. The plan failed, notwithstanding the liberal provision of no responsibility unless the whole was subscribed. The Directors then, finding that nothing was likely to be accomplished, and there being no prospect of selling bonds before the road was prepared for the iron, concluded it was useless to continue the effort any longer; and so, in August last, discontinued the salaries of officers and agents, except to pay for necessary services, discharged the engineers, and stopped all expenses possible; no work of consequence having been done on the road since the last report.

"But, while we cannot report success in our efforts to secure means for the further prosecution of the work, we have the satisfaction of announcing the payment of the ninety-seven thousand dollars of bonded debt which stood against the company at our last report, and, in connection with this, the settlement with our first contractor, William Sturgis, and the exchanging with him of receipts in full.

"It will be remembered that ninety-six thousand dollars of these bonds were reported in our last as held by Solomon Sturgis, of Zanesville, Ohio, and it may not be known to all the stockholders present that we have been negotiating more or less for the two years last past for the payment of these bonds, and that the great difficulty in this negotiation was to agree upon the value of the real estate we proffered in payment, and whether we did or did not owe William Sturgis some sixty-five thousand dollars, besides the bonds already given to him, arising out of his contract to furnish us money on bonds.

"We have uniformly denied that we were liable, in law or equity, for any sum other than the bonds already delivered to him.—These were the conditions which the parties occupied towards each other, to reconcile which, and to arrive at an agreement without being involved in prolonged and vexatious law suits, and without yielding our just rights, is what has been accomplished in these negotiations. It was of the first importance to us to pay off these bonds and stop the interest, which was consuming our means at a fearful rate; important, also, that we should set at rest the question of any further liability to William Sturgis.

"Much of the property parted with in this arrangement, exclusive of the mortgaged property to secure the payment of bonds, was in wild lands, which had been taken at prices much higher than we could sell them for again, although every effort had been made to turn them into money or labor on the road. The result is, that we realize by this settlement about sixty-eight per cent. of the cost of all the property conveyed in payment of bonds at par and interest due; we allow nothing for the extra claims, and get discharged



from all further obligations to said William Sturgis, of every kind or nature.

"The other outstanding bond of one thousand dollars has been found and taken up also, for which we paid property at an advance on its original cost.

"These bonds have all been cancelled, and the Trustee, Allen Hamilton, has been discharged from the trust, he having first released the mortgaged property to the company.

"There remains but one bond of one thousand dollars outstanding. It is held by Chas. W. Rockwell, the Trustee of the first and only mortgage made on the road bed. No other bonds authorized to be issued under that mortgage have been disposed of, and only about four hundred were ever executed. The printed forms, however, were obtained, and are ready to be filled up when required for use—until which time it was deemed advisable that no others should be executed; and if the work does not soon progress to completion, it will be desirable to cancel that whole issue—in which case, the Trustee would likely, for a small consideration, deliver up the one bond he holds, he having received it for his services for managing the trust property for the whole of the twenty years of time the bonds had to run to maturity.

"In our last report we gave a detailed statement of expenditures for the benefit of the road; also, of the indebtedness of the company, the condition of the subscription, and the general account; we now add to the results there stated the little that has been done the past year, to show our present condition, referring to last report for particulars to that date. The accounts are made up to the present date.

The total expenditures, as per last report, were.....	\$200,254 86
To which may be added as follows:	
For work done the past year in construction.....	1,624 59
For engineering.....	341 50
For salaries and expenses of officers and agents.....	2,496 70
For taxes.....	715 29
For interest, discounts and incidentals.....	8,546 67
For losses on sale of real estate, mostly accruing in the payment of the bonds and interest.....	41,103 11

Total to present date.....\$255,282 72

#### INDEBTEDNESS.

For one bond of \$1,000.....	\$1,000 00
For right of way.....	2,113 57
For loans.....	700 00
To individuals for various purposes.....	1,811 70

Total.....\$5,625 27

Indebtedness as per last year's report.....	\$124,773 15
Present indebtedness, as above.....	5,625 27

Decrease.....\$119,147 88

#### ASSETS.

Amount of real estate unsold.....	\$33,401 73
Amount of uncollected subscriptions, including notes on hand.....	18,667 06

Total.....\$52,068 79

"The amount deemed necessary to complete the road for the iron, from Fort Wayne to the intersection of the Logansport Railroad track near Richmond, from a careful estimate, made some two years ago, deducting what has been done since, may be stated as follows:

For grading and masonry from Fort Wayne to Bluffton.....	\$40,993 04
For grading and masonry from Bluffton to Camden.....	9,233 76
For grading and masonry from Camden to Winchester.....	29,701 67
For grading and masonry from Winchester to Richmond.....	89,212 67
For bridging the whole distance.....	11,240 00
For cross-ties.....	47,300 00
For engineering, right of way south of Camden, and other expenses.....	15,000 00

Total.....\$243,361 14

"This amount is wanted, exclusive of the present resources of the company, which we leave out to meet contingencies and present indebtedness.

"If the community interested in this enterprise would raise and expend this amount in preparing the road for the iron, we might hope soon to see the whole work completed.

"The importance of the enterprise, and the necessity for increasing the subscription to the capital stock, have been so frequently pointed out to the stockholders, that we do not deem it necessary to repeat the argument therefor in this report."

The officers for the ensuing year are:

President—Peter P. Bailey.

Secretary and Treasurer—Asahel Stone.

Directors—R. M. Pomeroy, Cincinnati, O.; James M. Poe, James R. Mendenhall, Wm. Hough, Wayne county, Ind.; Asahel Stone, Thomas Ward, Benjamin Hunt, Randolph county, Ind.; Geo. C. Whiteman, Jay county, Ind.; Peter P. Bailey, Allen county, Ind.

#### MILWAUKEE & BELLOIT R. R.

The Milwaukee *Sentinel* of April 7th says:

We are indebted to Horatio Hill, Esq., President of the Milwaukee & Beloit Railroad Company, for a copy of the first annual report of the Directors, with the reports of the Secretary and Chief Engineer, presented at the recent annual meeting, held in this city on the 4th inst. A map accompanies the report, showing the connections of the road, east and west, and demonstrating, without need of comments or figures, the very great importance of the route to the business interests of Milwaukee. The company organized formally about twelve months since, and in May last set their surveying parties at work, under the direction of Mr. D. C. Shepard, their capable Chief Engineer. Unusual pains were taken with the preliminary surveys, in order to insure the selection of the best line. The first division of the road, extending from this city to East Troy, Walworth county, was put under contract on the 17th of October last, and is to be completed by the 1st of September next. The second division, extending from East Troy to the point of intersection with the Racine & Mississippi Railroad, is designed to be put under contract and completed by the time the Racine Road reaches the Mississippi, which it is expected to do within a twelve-month. The estimated cost of the road, complete and ready for running, is put at \$24,000 per mile. If Elkhorn is chosen as the point of junction with the Racine Road, the Directors estimate their means for constructing the 43½ miles as follows:

First Mortgage Bonds.....	\$552,500
Present individual subscriptions.....	318,100
Milwaukee City Bonds.....	181,900
Contractors' subscriptions.....	80,000
Estimated increase private subscriptions.....	181,900

Total.....\$1,232,500

Should Delavan (48½ miles from Milwaukee) be selected as the point of junction, the

Directors estimate their means at \$1,420,400. In these estimates are included the increased private subscriptions to the amount of \$200,000 which the Directors hope to obtain within the next few weeks. If they succeed in this they pledge themselves to have the whole road completed, well equipped and running within twelve months from this date.

The road starts from the Milwaukee river in the immediate vicinity of the "Straight Cut," and pursues a general southwesterly course, with easy grades and but few curves, through a very fine farming country, touching the villages of Prattsburg, Mukwonago, East Troy, Troy, Elkhorn and Delavan. It has been located with great judgment, and possesses, in its depot grounds and dock front on our river, unequalled facilities for the transaction of its business. Notwithstanding the extreme severity of the past winter, good progress has been made in clearing, grubbing and grading the first division. Of this fact we had ocular evidence last week, having passed over the entire line between our city and Root river. We had not before fairly realized the fact that the Milwaukee & Beloit Railroad was actually under way, and were both surprised and gratified to find that so much work has already been done. Indeed there is no question that the road can be finished and opened throughout for business in a year from now, if the Directors obtain the small additional subscription (\$200,000) they ask for. There should be neither doubt nor delay on this point, and the capitalists, property owners and business men of this city, if they are as fully alive to their own and the public interests as we take them to be, will make up one-half, at least, of the required amount before another month has expired.

The following are the officers for the current year:

Directors—Wm. J. Whaling, Horatio Hill, M. B. Medbury, G. D. Dousman and Lester Sexton, of Milwaukee; S. Andrews, Mukwonago; E. Eldermin, Elkhorn; E. F. Mabie, Delavan; E. H. Ball, East Troy.

President—Horatio Hill.

Treasurer—S. Andrews.

Vice President—E. H. Ball.

Chief Engineer—D. C. Shepard.

Secretary—A. O. Babcock.

Asst. Secretary—R. H. Hewitt.

#### THE STUMP HOUSE TUNNEL ON THE BLUE RIDGE R. R.

A correspondent of the Edgefield Advertiser, writing from Pickens District, gives an interesting sketch of the German settlement at Walhalla, and of the various points of attraction in the vicinity; and describes the present state of operations at the Stump House Tunnel, from which we make the following extract:

"Geo. Collyer & Co., the present contractors at the Stump House Tunnel, have about two hundred hands at work, by relays, day and night. More than three hundred feet of rock have been excavated, at the eastern end of the Tunnel. At the western end, and workmen have gone into the rocks about fifty feet, though the tunneling here is not quite down to grade. There are four shafts: No. 1, counting from the east, has to be sunk 161 feet; No. 2, 226 feet; No. 3, 213 feet; No. 4, 189 feet. No. 1 is sunk deep enough for the miners to commence tunnelling; this gives two new faces upon which to operate. The other shafts can be sunk to grade in the course of this year. At each end of the tunnel thirty feet a month can be



excavated by the contractor, and forty feet a month can be completed in each shaft; consequently the work is now progressing at the rate of one hundred feet every month. As each shaft is sunk to grade, this progress will be increased by forty feet per month. Collyer has two steam engines and one horse gin at work, and there is another steam engine of forty horse power on the way from Philadelphia. Those engines are used to draw rock and water out of the shafts.

"The Stump House Tunnel is one mile 572 feet long, 16 feet wide and 20 feet high. This tunnel is a heavy job, but it can undoubtedly be finished in the course of three years. Indeed Collyer has contracted to complete all the work in two-and-a-half years from January, 1857, and I believe he can do it. Virginia has let daylight shine through a mountain barrier no less formidable than that of the Stump House mountain, and with this noble example before their eyes, our people cannot harbor such a thought as failure. The importance of the Blue Ridge Railroad to the city of Charleston, and to the State of South Carolina, at large can hardly be overestimated. The teeming West stands ready to pour the contents of her overflowing granaries into the lap of our commercial emporium, as soon as the locomotives can be made to scale the heights of the Alleghanies. The heart of the State being enriched by the vast influx of trade, the glow and vigor of an unwonted prosperity will be forced out to the very extremities of the body politic."

[From the Sturgis Republican.]

#### THE GRAND RAPIDS & INDIANA R. R.

This enterprise is one of vast importance to the country along the line of the road. The recent grant of public lands conferred upon the company by the Legislature of this State secures the completion of the entire line, as a single and whole enterprise, from the Straits of Mackinaw to the city of Fort Wayne, in the State of Indiana.

The amount of lands conferred will not be less than 614,460 acres; and a liberal and fair construction of the law of Congress making the grant would put the number of acres at 825,600.

These lands are generally rich, heavily timbered farming lands, or *pine lands*. The line of the road will not be more than forty miles from Lake Michigan at any point. It occupies the western slope of the State. Its entire position and its connections will be more perfectly understood by an examination of the cut accompanying this article. Good judges of western lands report, from personal examination, that the whole country through which this grant extends is of a soil unexcelled by any body of lands known in the west; for corn, wheat, grass and potato crops it is well adapted. These articles are all cultivated with good success in the vicinity of the Straits; and the soil is equally rich from the Straits to Grand Rapids.

This portion of the road will connect with the commerce of the lakes at Little Traverse Bay, Grand Traverse Bay, Newaygo and Grand Rapids. At the two former places it will connect directly with the shipping of the lakes, and at the two latter it will connect with the lake by means of steamboats, which run from those two points to the lake.

This northern part of the road will cross the Great Manistee, Pinc, Little Manistee, Perc Marquette, White, Muskegon and Grand rivers at points sufficiently low down to secure a large commerce, which will naturally float down them, to the road. The most important item is the large amount of timber which will be sure to float down stream. A very large extent of country is drained by these rivers—more especially by the Great Manistee, Muskegon and Grand rivers.

The whole country is exceedingly well watered with never-failing streams, which are unexcelled for the purposes of machinery, and it is well supplied with springs of the purest water.

The greater part of the pine timber grows intermixed with hardwood timber, the soil upon which it grows being good farming land. The soil on which pine alone grows is thinner, but has been tried for wheat with fair results. The pine groves are frequently interspersed with hemlock. These pine lands are much more valuable than farming lands.

As far as experience teaches, as tested by settlers from Grand river to the Muskegon river, and from Grand Traverse Bay to the Straits of Mackinaw, no portion of the west is more healthy; and some of these settlers have resided in the specified localities for more than twenty years.

A portion of this country, from the Muskegon river to near Grand Traverse Bay, embracing a space of near eighty-five miles, is an unbroken wilderness.

Some may think it unreasonable that such a country as this is here represented to be should have been so long overlooked by the emigrant. The reasons of this fact, however, are obvious. Our State is a peninsula, and extends far north of the two great thoroughfares which cross the southern end—the M. S. R. R. and the M. C. R. R. This southern portion of the State has been long ago settled; the emigrant was always inclined to go to the end of the road, and settle down in Iowa or Illinois, in preference to getting off the road in Michigan, and winding his way to the north, over roads proverbially "hard;" and if he should do so, he would find himself cut off from any communication with the rest of mankind, after he had located at the north; for the State being surrounded by lakes, east north and west, and these lakes being shut up by ice  $\frac{1}{2}$  of the year, rendered the middle and northern portions of the State difficult of access. These reasons have prevented the best portion of the State from being settled. The recent wise policy of the General Government, in making grants on lines of railroads extending north and south through our peninsular State, will soon bring that neglected portion into notice, and into cultivation and improvement.

The foregoing facts go, in some measure, to show the probable value of the lands conferred upon the Grand Rapids & Indiana Railroad Co. We have heard several estimates of their value by those who have examined them, and who are well qualified to make a judicious estimate of their value, and the lowest estimated value, after the road is completed, is \$10 per acre—some have put them as high as \$15. We take the lowest as a safe one.

Their proximity to lake navigation; having several navigable rivers passing through them; the abundance of hydraulic power; the healthfulness of the climate; the fertility of the soil; and lying immediately on the line of this railroad, are facts which contribute to enhance the value of these lands.

Should the Department at Washington be governed by a narrow policy, and confine the grant to 614,460 acres, then, at \$10 per acre, it will amount to \$6,144,600, which is "a good basis" for the company; but should a liberal policy prevail, then the lands will be sufficient to reach the sum of \$8,256,000.

The length of this road, from the Straits of Mackinaw to Fort Wayne, will be about 350 miles. If the company meet with as good success as the merits of the enterprise deserve, the entire cost of the road should not be over \$25,000 per mile, which makes an aggregate sum of \$8,750,000. Then, if our calculations are correct, good management on the part of the company, and a tolerable share of good luck, will

enable them to construct the road, and keep their lands on hand until the amount realized from their sale will discharge nearly the entire cost of construction and equipments. If these views of the subject are correct, the future prospects of the company are indeed flattering.

The propriety of making the Straits of Mackinaw the northern terminus of this road is very obvious. 1. It takes the road through the entire length of the State. And 2. A crossing will here be had over the lake all seasons of the year, either by ferrage in the summer, or a good and safe bridge of ice in the winter, which secures a communication with the country north of the State in the winter season—an advantage which cannot be had at any other point.

The villages through which this line of road passes are generally in a healthy and prosperous condition. At the northern terminus is the village of Mackinaw; on Traverse Bay there are several small villages; the next village is Newaygo, which is the county seat of Newaygo county; the next place is the city of Grand Rapids, then Otsego, Kalamazoo, Brady, Mendon, Sturgis, Lima, Lagrange, Wolcottville, Rome, and after that the road may be so located as to touch no other village until it reaches the city of Fort Wayne. It will pass near several between Rome and Fort Wayne. At Traverse Bay, Newaygo, Grand Rapids, and Otsego, there are already considerable mill improvements; and there is a vast amount of water power at each of them. The whole country, so far as settlements extend, is pretty well supplied with saw mills, and as soon as this road is constructed many more villages and mills will be the consequence.

An important feature in the improvement of this country is the fact that the attention of capitalists is being turned thitherward. At Newaygo, on the outskirts of the settlement, there is one mill running over one hundred saws, and capable of cutting from 40,000 to 50,000 feet of lumber per day—the property of the "Newaygo Company." The various natural resources of the country will attract a vast amount of wealth to those northern regions of Michigan. Emigration will soon set in this direction. That kind of business which naturally grows out of a country endowed with such resources, will induce a population which is more locomotive in its character, and will move about, and is better calculated to contribute to the business of a railroad, in proportion to its numbers, than an ordinary population.

The plaster interest at Grand Rapids is of great importance to the country, and will be greatly increased by the construction of this road. This plaster has been sufficiently tested to demonstrate its superiority as a fertilizer, for stucco, and for marble fronts of brick buildings. This latter use of plaster is in the form of blocks dressed out of the native stone. Plaster fronts of large and costly buildings are now to be seen in the city of Grand Rapids. They are very fine, and this use of the article will soon be increased largely, which will add to the importance of the plaster interest; and all the uses to which plaster can be applied, when combined, will cause that article to become one of immense importance.

#### THE PROSPECTS OF BUSINESS FOR THE ROAD.

The prospects for local business are as good as any new country can hold out. The soil being so well adapted to farming purposes, the abundance of hydraulic power, the fascination of beautiful groves of evergreen, and the great abundance of pine timber, the inland channels of communication that will soon be made, by the construction of the several railroads provided for and secured through the grants of public lands, and such a large body of land, so well adapted to cultivation and improvements, will all combine to induce a great flood of emigration to this northern portion of the State, which





will soon open up and improve the country, so as to afford a large local business to the road.

South of Grand Rapids, and all the way to Fort Wayne, the country is equal to any in the west. It is already well improved, and the local business of this part of the line will be as good as that of any other country.

Northern Michigan produces immense quantities of pine, plaster, white fish, minerals, &c.

It is an easy matter to demonstrate that as the country south of the M. C. R. R. is entirely destitute of those articles, the entire supply has to pass over this road, and will contribute a sufficient amount of freight from the north to the south to insure a good profit from its freight business; as to the return business something to

carry back to the north, we think the contributions from the south to north will be all that can be desired. At this present time, and for years to come, we shall ship nearly all the supplies of coarse grains, provisions, goods, &c., from the southern portion of Michigan and Northern Indiana, for the pine and lumber country. The jobbing business of the city of Cincinnati is of great magnitude; our merchants can purchase a bill of dry goods as low in Cincinnati as in New York; they can purchase sugars, molasses, soaps, candles, alcohol, tobacco, and all articles manufactured out of these, at a lower price there than in the city of New York. Glass and iron are cheaper in Pittsburgh than in New York. These facts will secure a large and a permanent trade with Cincinnati and Pittsburgh. One-third of the year at least the lake and canals are closed. The distance by railroad from Sturgis to New York is 828 miles; to Cincinnati 198 miles—not one-fourth the distance to New York. This will throw into Cincinnati all the winter trade of this country. These facts show where the supply of business from the south to the north, for this road, will come from.

In the summer season this line will make a great thoroughfare for pleasure seekers, on their way to the beautiful, picturesque and healthful regions of Mackinaw. When all nature is locked up in the cold and icy embrace of winter, there will be hundreds and thousands from the north seeking winter quarters in the "fair and sunny south." This kind of travel will be very considerable; and thousands of items which make up the commerce of the country—products of the different latitudes, would become an aggregate of importance to the business of this road. Business based upon the various and peculiar products of the latitudes, would be one as lasting as the laws of nature. When all these subjects of commerce and travel shall have such a channel for transit as this road and connections will open up, its business will produce an aggregate the magnitude of which can only be known by the results that may take place. We merely glance at this part of the subject; the reader will carry out the chain of the argument, and cannot fail to arrive at a pretty fair conclusion as to the amount of business that will surely grow up on the construction of this road, and contribute to its support.

The foregoing calculations are based upon particular articles and upon particular circumstances; but the fact that by the time this road is completed from the Straits of Mackinaw to the city of Fort Wayne, there will be a direct railroad communication with Charleston, Savannah, Mobile and New Orleans, crossing the entire length of the Union; embracing all the various products of sixteen degrees of latitude; connecting by the shortest possible line the greatest variety of climate, the richest and most productive southern, middle and northern States—all these advantages will surely secure to this road a sustaining business.

#### CONNECTIONS OF THE G. R. & I. R. R.

The connections of the road, as will appear by an examination of the accompanying cut, are all that could be desired. From Fort Wayne there are two roads under construction running directly to the city of Cincinnati, either of which would make a direct continuation of this. From Cincinnati there will soon be roads running to all parts of the South—which secures to this road the very best possible Southern connections.

Another important connection at Fort Wayne is the Toledo, Wabash & St. Louis R. R., which gives the best southwestern connections possible.

Still another, and by no means the least important connection, is that of the Pittsburgh, Fort Wayne & Chicago R. R., from the city of Fort Wayne to Pittsburgh, and thence, by other continuous lines, to Harrisburg, Philadelphia, and New York, &c. This will be a very impor-



tant eastern connection, which will appear obvious to any one who will calculate the distances from the village of Sturgis to New York via the Michigan Southern Railroad and its connections, which is, from Sturgis to New York, 828 miles; and by the *Grand Rapids & Indiana Railroad*, from Sturgis, via Fort Wayne, Pittsburgh and Philadelphia, to New York, it is 809 miles—being 19 miles nearer than by the Southern Michigan Railroad, &c. And when it is recollected that Pittsburg is the best iron and glass market in the United States, and that Philadelphia is the second commercial city in the Union, it becomes manifest that this is the best route for the merchant when he goes east to make his purchases.

The counections at Fort Wayne are well calculated to induce and promote *through travel* over this road. The lines of railroad in contact with which this comes are crossed at *right angles* in all instances, which fact prevents them from becoming competitors, but, on the other hand, converts them all into tributaries to this. When the passenger or freight trains shall come down from the north to the Michigan Central Railroad, they will always have on board more or less passengers and freight destined to the east and to the west along the line of that road, which would not have been taken shipping aboard this road had it not been for the fact that it crosses the "Central;" and this freight and passenger business would not have been contributed to the "Central" had it not been for the construction of this road; and, on the other hand, as soon as this road is constructed an additional business will grow up on the "Central," from both the east and the west of the crossing, which will seek this road—some bound to the north and some bound to the south. The northern extension and southern connections of this road will be so ample that it will necessarily call out a large amount of business along the line of the "Central;" and thus the fact of such a crossing of the two roads will contribute to the enhancement of the business of each; and this will be the case at the crossing of the Michigan Southern Railroad, the Air Line Railroad, and Logansport & Northern Indiana Railroad. A contribution to the business of this road will be the natural result of each railroad crossing. As the trains pass to the north or to the south, more or less business will be contributed by them to this, and by this contributed to them. There will be a mutuality of contributions to each other; for, as above intimated, this road will bring to them a large amount of business which they would not get only through the construction of this; and they will contribute business to this which it would not get were it not for the existence of those several roads.

#### DIRECT CONNECTIONS WITH CINCINNATI.

The "Railroad Record" of the 12th inst., in an able article on the "Cincinnati & Mackinaw R. R.," with an accompanying wood cut, making a big straight line from Cincinnati to Mackinaw, designed to represent said Cin. & M. R. R., in connection with the A. L. & T. B. R. R., and another line pretty fairly representing the "Grand Rapids & Indiana R. R." down to Fort Wayne, and thence diverging it off, by the way of Indianapolis, to Louisville, Kentucky, has been shown to us, and we propose to notice a few points in said article. We would remark that if in said wood cut the editor had put down the "Fort Wayne & Cincinnati Railroad," or the "Cincinnati, Union & Fort Wayne Railroad," with their proper connections, it would have done all parties "better justice."

#### PROBABLE COST OF CONSTRUCTION PER MILE.

The *Record* estimates the cost of a railroad from Cincinnati to Mackinaw at \$30,000 per mile. We do not profess to be learned in the science of railroad making, yet we think that we do know enough about the business to reduce the estimate of the *Record*.

We think that the road bed could be prepared for \$3,300 per mile; but we know it can be done for.....\$6,505  
Superstructure per mile.....9,653  
Equipment per mile.....2,334  
Buildings per mile.....1,508  
Discounts and incidental expenditures.....5,000

Total cost per mile.....\$25,000

The estimate of the road bed we know is reasonable, and that it can be done for that sum, or less.

The above estimated cost per mile, so far as relates to discounts, is, in view of the large and valuable grant of lands, which we think will give the company a good credit; and should such prove to be so, then we think our estimate is correct, and that the final result will prove it to be true. The cost for *right of way*, we are informed, cannot be over \$300 per mile.

#### THE AMHOY, LANSING & TRAVERSE BAY R. R.

The *Record* represents the Amhoy, Lausing & Traverse Bay R. R. as traversing the central counties of the State, &c. This is a decided variation from the facts in reference to the intended location of that road. The grant was conferred upon a company, the officers and stockholders of which reside at Jonesville, Alhion, Eaton Rapids, Lansing, Owosso and Saginaw, all of which it was, and now is intended shall be made points in the location of said railroad. This will undoubtedly be its location. This location is no detriment to the interests of the company, nor to the interests of the country. The two grants of lands secure the construction of two north and south railroads. The Grand Rapids & I. R. R. will be located near the western shore of the State, and if the A. L. & T. B. R. R. is continued from Saginaw to Duncan, and thence to Mackinaw (if the interests of the enterprise take it to that point), it will be the most judicious location that can be made. The same reasons which take the Grand Rapids & Indiana Railroad to the western side of the State, apply with equal force to the Amhoy, Lansing & Traverse Bay Railroad, throwing it over to the eastern side of the State. The advantages of communications with the commerce of the lakes, crossing rivers low down, where the produce of the country will naturally float—all these considerations point out the eastern side of the State as the proper location for said A. L. & T. B. R. R. Added to the geographical and commercial considerations which indicate the eastern side of the State as the proper location for said road, is the additional consideration that by such location these two roads will be out of the way of each other, and thereby avoid any injurious consequences of competition, that would inevitably arise from a too close proximity to each other.

Some may think this eastern location is a violation of the intent of the Congressional grant, which requires that the road should touch or terminate at some point on or near Traverse Bay. This idea arises from the fact of a too careless examination of the law of Congress and the geography of the State. The words of the Congressional statute, in reference to the northern terminus of the lines, are these: "To some point on or near Traverse Bay." The last words, "Traverse Bay," are as uncertain, indefinite and unfixed in their meaning as the preceding words, "to some point on or near." This indefinite phraseology was intentionally introduced into the Congressional law, because the committee had not sufficient information on the subject, to enable them to make a judicious terminus of the lines of those north and south railroads for which they were providing grants of land. Some thought that the most judicious terminus was on Grand Traverse Bay, for the purpose of connecting exclusively with another line of road provided for in the Upper Peninsula, "from Little Bay de Noquet to Marquette, and thence to Ontonagon." The petitioners for these grants from both points (Grand Rapids and Amhoy) asked Congress to make the grants

to the "Straits of Mackinaw." The law says, "to some point on or near Traverse Bay." There are two "Traverse Bays," adjoining each other, both very large at their communications with the lake—Grand Traverse and Little Traverse. The space from the Southern point on Grand Traverse Bay to the most northern point on Little Traverse Bay embraces a distance of more than sixty miles; and from the most northern point of Little Traverse Bay to the Straits of Mackinaw is less than thirty miles. These facts were all well known to the Committee when the bill was drawn up. It was made thus indefinite to give the companies the privilege of making the most judicious locations. And, therefore, it seems to us that it is no violation of the intention and object of Congressional law to terminate these lines at the Straits of Mackinaw.

#### THE CINCINNATI & MACKINAW R. R.

We think the *Record* is equally mistaken in its policy when it advocates the construction of the "Cincinnati & Mackinaw Railroad."

There are now two railroads being constructed from Cincinnati to Fort Wayne, in an adjoining tier of counties, and only a few miles west of the proposed Cin. & M. R. R., on each of which large sums of money have been expended; under these circumstances, it does seem to our mind perfect folly, if not downright madness, to commence a third parallel railroad from Cincinnati to the north. There is one road too many already commenced. The commencement of another parallel and competing road is, in our opinion, uncalled for, and exhibits a recklessness that illy becomes a discreet and astute railroad advocate. Three parallel competing railroads from Cincinnati to the north, all struggling for construction at once! We cannot think that any considerable amount of Cincinnati capital will be so recklessly disposed of as to be invested in this new and third project.

In describing the line of the Grand Rapids & Indiana Railroad, it is represented as running from Fort Wayne, through the western counties of the State of Ohio, to Cincinnati; or southwesterly through Indiana to New Albany. There are two better and shorter routes from Fort Wayne to Cincinnati than this indicated by the *Record*. They are now considerably advanced in their construction. Twenty miles of one are now ready for the iron, and one-half the earth-work of the other is already done. Some three or four hundred thousand dollars have already been expended on them. The "Cincinnati & Mackinaw Railroad Company" is an Ohio Company, whose line of road extends from Cincinnati to Amhoy, on the Michigan line—running through the western tier of counties in Ohio. The work on this road is not commenced; nothing more than a mere nominal expenditure has been incurred by that company. It would be poor policy in the Grand Rapids & Indiana Railroad Company to leave both of the lines from Fort Wayne directly to Cincinnati, and connect with the C. & M. R. R. The road from Mackinaw to Fort Wayne is one single road, and of course will have a track of one uniform gauge; then, since there are two roads from Fort Wayne to Cincinnati, the work of which is partly done, and both of which will desire to make the most intimate connections, it is easy to conceive the probability of such arrangement as will secure one continuous and uniform gauge from Mackinaw to Cincinnati; so that the same car that starts from Mackinaw will land in Cincinnati. We understand that it is the determination of the officers of the G. R. & I. R. R. Co. to make such arrangements south of Fort Wayne—and we presume that they will never abandon their purpose until such arrangements are consummated.

We think a judicious location of the A. L. & T. B. R. R. would make Fort Wayne a point in its way to Cincinnati. Such considerations as take the G. R. & I. R. R. there would influence this to the same point.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot. of Bonds.	Name of Company.	Quot. of Stock.	Ln. of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp'sr	173		5,000,000.00				
408,800	0			1862-3	2d "	.....	Androsco'g'n & Kennebec	5455		1,400,000.00		209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	86.5		1,000,000.00	199,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646				now	"	.....	B'ng'r, Old T. & Milford..	12.5		135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53
500,000	6		N. Y.	1860	"	.....	Boston & Worcester...	44 5-8		4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m
500,000	7			1857-9-62	1st mortgage.	.....	Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000	7			1864	Domestic.	.....	"							
200,000	7			1872	Income.	.....	"							
577,187	6			1874	4th mortgage.	30	Central Ohio.							
192,200	7			1874	1st mortgage.	.....	Champl'n & St. Law'rnce	43		1,872,800.00	1,001,087.00	165,200.00	77,700.00	10 per ct.
380,000	7				2d "	.....	"							
1,140,000				1864-7	Domestic.	.....	Ch'r'l'te & South Carolina.	110		1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
1,300,000	6-7-8		N. Y.	1868-9	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	138		3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
374,000	8			1863-76	2d "	.....	"							
1,300,000					Convertible.	.....	"							
532,000					1st mortgage.	.....	Chicago, Fulton & Iowa.							
104,000					2d "	.....	Cin. Wil'ng'n & Zanes'ville	13 1/2		1,761,149.16	2,241,500.00	221,491.96		
305,500					3d "	.....	"							
540,000	6			1873	Income.	.....	"							
400,000	7			1864	1st mortgage.	.....	Cleveland & Mahoning..	85		1,500,000.00				
000,000	7			1873	2d "	.....	"							
500,000	6			1857-8-9	1st mortgage.	.....	Cumberland Valley.....	52		1,218,300.00		160,511.56	81,101.56	\$33,250.24
350,000					2d "	.....	Dayton & Cin. short line.	52		1,000,000.00	1,000,000.00			
740,000	7			1869	1st mortgage.	.....	Eastern Railroad.	936-10		3,345,000.00		665,578.79	288,077.84	\$294,133
88,000	10			1861	2d "	.....	East Ten. & Virginia....	130		625,450.00		30,897.30	19,692.30	
400,000	7			1864	1st mortgage.	.....	Essex Railroad.	20		700,000.00				
200,000	10				2d "	.....	Evansville & Crawf'd'yle	109		2,228,657.30		243,970.42	136,061.90	\$133,921.45
					3d "	.....	The Fitchburg (Mass.) R.R.	3		3,540,000.00		681,162.52	213,837.81	3 per cent.
					1st mortgage.	.....	Fox River Valley.	33		800,000.00				
100,000	6				2d "	.....	Fair Haven Branch.	15		300,000.00		50,381.33	14,822.45	\$166,240.00
100,000	6				3d "	.....	Georgia RR & Banking Co.	233		4,156,000.00		1,068,202.59	357,639.42	\$166,240.00
					1st mortgage.	.....	G't Falls & Conway R.R.	20					14,207.07	
300,000	6 1-9			1858	1st "	.....	G't West'n R.R. of Can..	281 1/2		4,101,550.00		2,068,836.00		8 pr. ct.
4,000,000				1869-70	1st "	.....	Housatonic Railroad.	74		2,000,000.00		339,196.50	176,529.92	
2,000,000				1860	2d "	.....	Hudson River.	144		4,000,000.00		1,924,322.44	718,037.40	
1,812,000				1873	3d mortgage.	.....	"	144		4,000,000.00				
2,885,000				1875	1st "	.....	Illinois Central R.R.	131 1/2		17,000,000.00		1,532,117.00	562,321.00	7 pr. ct.
4,115,000				1860	2d "	.....	"	704		17,000,000.00				3 pr. ct.
3,000,000					1st mortgage.	.....	Indiana Central.....	72 1/2				354,871.00		
600,000		Nov. 1,		1862	1st "	.....	Iron R. R.	13		123,700.00				
700,000		Jan. & July 1			2d "	.....	Kentucky Cen. 2d Div.			719,500.00				
50,000					1st "	.....	Knoxville & Kentucky..							
700,000					2d "	.....	Laurens (S. C.) R. R.	32		166,000.00		23,233.59	14,233.59	
					1st "	.....	Louisville & Nashville...	184						
					2d "	.....	Lowell & Lawrence	12 35-		300,000.00		50,224.71	14,149.13	\$8,000
					3d "	.....	Mad River & Lake Erie...			2,697,090.00		587,236.57		10 pr. ct.
					1st "	.....	"			2,697,090.00			162,277.50	
					2d "	.....	"			2,697,090.00				
					1st "	.....	Manchester & Lawrence.	26		1,000,000.00				\$24,000
					2d "	.....	Marietta & Cincinnati...							
					1st "	.....	Mexican Gulf R. R.	27						
					2d "	.....	Milwaukee & Horicon...	30						
					1st "	.....	Mineral Point R. R.	32						
					2d "	.....	"	32						
					1st "	.....	Mobile & Ohio.	497		10,000,000.00		253,498.96	162,802.24	
					2d "	.....	Nashua & Lowell R. R.	15		600,000.00		19,752.42	55,501.74	7 pr. ct.
					3d "	.....	New Haven & Northm'tn	55		922,500.00				2 pr. ct. 6m
					1st mortgage.	.....	New York Central.....	88 1/2		23,067,400	14,763,897	7,707,348	3,609,481	3 pr. ct. 6m
					2d "	.....	"							
					3d "	.....	"							
					1st mortgage.	.....	N. Y. & Harlem R. R.	123		5,717,100.00		1,040,393.26	64,678.71	\$37,692.30
					2d "	.....	"							
					1st "	.....	N. Y., Prov. & Boston...	50		1,58,000.00		245,713.00	51,544.40	
					2d "	.....	N. Lon., William'tu & Pal.	66		1,700,000.00		120,571.50		\$25,000
					3d "	.....	"							
					1st mortgage.	.....	Pontchartrain R. R.	5		500,000.00				
					2d "	.....	N. O., Opelousa & Gr't West.			6,000,000.00		116,795.00	366,118.80	7 pr. ct.
					3d "	.....	N. Y. & New Haven.	62 1/2		3,000,000.00		1,007,666.48		
					1st mortgage.	.....	North Western Va. R. R.	103 1/2						
					2d "	.....	"							
					3d "	.....	"							
					1st mortgage.	.....	Northern (N. Y.) R. R.	118		2,000,000.00		600,000.00		7 pr. ct.
					2d "	.....	North Missouri R. R.	19 1/2				25,176.74	88,458.56	2 1/2 pr. ct.
					3d "	.....	Norwich & Worcester R.R.	60		2,111,500.00		304,236.33		
					1st mortgage.	.....	"							
					2d "	.....	Ogd'sb'g, Clay'tn & Rome							
					3d "	.....	Ontario, Simcoe & Huron	94				289,690.10	137,875.93	5 pr. ct.
					1st mortgage.	.....	Orange & Alexandria R.R.	88 3-		2,957,500.00		276,539.02		
					2d "	.....	"							
					3d "	.....	"							
					1st mortgage.	.....	Peoria & Bureau Val. R. R.	47		1,500,000.00				6 pr. ct.
					2d "	.....	"							
					3d "	.....	"							
					1st mortgage.	.....	Philadelphia & Trenton..	28 1-5		1,000,000.00				
					2d "	.....	Portsmouth & Concord.	47						
					3d "	.....	Potsdam & Watertown...	76		2,000,000.00				
					1st mortgage.	.....	Rutland & Washington...	62 1/2		950,000.00		68,525.42		
					2d "	.....	St. Louis & Iron Moun. R.R.	86		6,000,000.00				
					3d "	.....	Salem & St. Louis R. R.	168 3/2		400,000.00				
					1st mortgage.	.....	Snd'sky, Mansf'd & New'k	116					19,050.64	
					2d "	.....	Sullivan Railroad.	26		500,000.00		75,246.06		
					3d "	.....	"						17,378.08	
					1st mortgage.	.....	Tennessee & Alabama...	145				39,586.44		11m. 15 pr. ct.
					2d "	.....	Terre Haute & Richmond	73		1,294,450.00				
					3d "	.....	Toledo, Wabash & Western	212						
					1st mortgage.	.....	Troy & Boston.			1,000,000.00				
					2d "	.....	"							
					3d "	.....	"							
					1st, 2d, 3d "	.....	Vicksburg & Jackson...	46		3,000,000.00		322,048.60	165,076.04	2 pr. ct.
					2d "	.....	Virginia & Tennessee.	215		105,000.00				
					3d "	.....	Westchester (Pa.) R. R.	31						
					1st mortgage.	.....	Wilmington & Manchester	171						
					2d "	.....	"							
					3d "	.....	"							
					1st mortgage.	.....	Winchester & Potomac...	32						
					2d "	.....	Worcester & Nashua....	45 69-						



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

February 20, 1857

Belvidere, Del. guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858.	"	"
Cin. Ham & Dayton, 2d mort., .....	"	80
Detroit & Milwaukee, 1st mort., conv. till 1863.	"	71
Erie, 3d Mortgage, 1863.	"	86
" Sinking Fund, .....	"	87
" conv. 1863	"	80
Grand Trunk (Canada) Debenture, .....	"	83
Great Western " conv. ....	"	123
" " non-conv. ....	"	110
Illinois Central, 1st Mort., 7 1/2% .....	"	92
" " with option 70 per cent. shares till Jan. 1858.	"	110
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent. ....	"	86
Little Miami 1st Mort. not conv. 6 1/2% .....	"	"
Marietta and Cincinnati, 1st Mort. ....	"	"
Michigan Central, conv. 8 1/2% 1860.	"	95
do do do 1869.	"	93
N.York Central. No Mort. Not conv. 6 1/2% .....	"	81
" " conv. 7 1/2% .....	"	95
Ohio and Mississippi, 1st Mort. ....	"	"
Ohio and Pennsylvania, Income 1872.	"	72
Panama. No mort. conv. 1866.	"	"
Pennsylvania, 1st Mort., conv. ....	"	90
" " Sterling, 2d Mort. ....	"	94
Stenberville and Ind., 2d Mort. ....	"	"

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending April 15, 1857.

## BONDS.

\$6,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 2d mort. Bonds.	82	and Int.
2,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds.	82	
5,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds.	67 1/2	
1,000 Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds due '61.	90	
1,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds.	50	"
3,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. bonds.	60	
1,000 Indiana Central R. R. Co. 10 per cent. Income Bonds, due in '58.	95	"
5,000 Cin., Wil. & Zanesville R. R. Co. 7 per cent. 2d mort. Bonds.	25	"
2,000 Cincinnati, Wilmington & Zanesville R. R. Co. 7 per cent. 3d mort. Bonds.	15	"
1,500 Cov. & Lex. R. R. Co. 6 per cent. Income Bonds.	45	
3,000 Cincinnati & Whitewater Canal Bonds.	10	

## STOCKS.

200 Shares Southern Pacific.	\$3 25	for \$5 paid.
1 1/8 " Cin. & Chicago.	2 1/2	and int.
196 " Ohio & Miss.	11 1/2	
42 " Indianapolis and Cin.	65	
80 " Little Miami.	93	
50 " do do 30ds.	94	
200 " Ohio and Miss. 30ds.	12	
35 " Indiana Central.	50	
16 " Columbus & Xenia.	92 1/2	
20 " Cin., Ham. & Dayton 10ds.	72	
400 " Marietta & Cincinnati, 90ds	20	"
50 " Mad River & Lake Erie.	14	
10 " Farmers' Bank Ky.	118	

## MONETARY AND COMMERCIAL.

We see, as yet, no decrease in the stringency which has thus far characterized the month of April. Capital is neither abundant nor readily supplied to meet the wants of trade. Currency is scarce, and Eastern exchange still rules 1/4 to 1 per cent. Lower rates might tempt eastern circulation here to aid the purposes of trade; but while high premiums rule we do not expect to see much improvement in the money markets. Exchange on New Orleans is also more in demand, and we quote it this week at par to 1/2 prem.

From the east we notice a more confident tone in the money articles of the journals, but no reduction in the rates of interest. Stocks, however, are improving, and capital at current rates more readily obtained.

The Erie Railroad Co. have declared a stock dividend of 10 per cent., payable on April 27th. This is out of the

proceeds of the sinking fund, invested in the bonds of 1875.

Hewson & Holmes, in their circular, say:

Since our last weekly circular there has been a slight advance in the shares of leading railway stocks: Little Miami and Hamilton & Dayton have each advanced 1/2 per cent., with but very little offering; Marietta & Cincinnati shares are in demand, and, but for the continued scarcity of money, would advance. We note a sale of 400 shares at 20 per cent., 90 days; more could be sold on the same terms, but it is now firmly held at 20 cash.

In Bonds we have about the same quotations as last week. We know of an outside sale of \$25,000 Cincinnati, Hamilton & Dayton first mortgage Bonds at 86.

The earnings of the Mad River & Lake Erie Road show a handsome increase over the corresponding period of last year. They are as follows:

Passengers.	March, 1857.
Freight	\$16,423 20
Mail and incidental.	30,546 62
	2,371 50

\$49,341 32

Passengers.	March, 1856.
Freight	\$16,358 87
Mail.	24,327 49
	1,525 00

42,211 36

Increase (17 per cent.).....\$7,129 96  
Eastern exchange has again advanced to 1/4 and 1 per cent., buying and selling. Sight on New Orleans 1/2 discount to 1/4 prem.

Currency continues scarce; consequently the rate of interest in the street is high. First class paper can, however, be sold at 1 to 1 1/4. We look for an easier money market in the next ten days.

—MISSISSIPPI & TENNESSEE R. R.—The cars on this road are now running to Sardis, Miss., 27 miles south of Hernando. The citizens of Panola recommend strongly the building of a branch road to connect this road, at Panola, with the New Orleans & Jackson R. R., at Canton or Jackson. An amendment to the charter of the Miss. & Tenn. R. R. Co., authorizing this, was passed by the Legislature and accepted by the stockholders.

## LIABILITY OF TRUSTEES OF CORPORATIONS.

David Gwynne vs. Thomas B. Kellel—BRADY J.—The liability of the defendant depends upon the construction to be given to the 12th section of the act to authorize the formation of corporations for manufacturing, mining, mechanical or chemical purposes. (Session Laws 1848. p. 54.) The defendant was one of the trustees named in the original certificate required by the first section of the Act referred to, and which certificate was filed in the office of the Clerk of the City and County of New York, on the 1st of June, 1853, and the duplicate thereof filed in the office of the Secretary of State of the State of New York, some time during said month. By section 2nd of the Act, the persons who signed the same and their successors when the certificate was filed, became a body corporate and politic, with all the powers conferred by the statute. The 12th section of the Act provides that "Every such Company shall annually within twenty days from the first day of

January, make a report which shall be signed by the President and a majority of the Trustees," &c., and also providing that "if any of the said Companies shall fail to do so, all the Trustees of the Company shall be jointly and severally liable for all the debts of the Company then existing, and for all that shall be contracted before such report shall be made."

The Ohio River Land and Marble Company, created by the certificate aforesaid, and of which the defendant was one of the original Trustees, omitted, within 20 days from the 1st of January, 1854, or at any time afterwards, to make the report required by the last-mentioned section, and the plaintiffs insists that the defendants became therefore personally responsible to them by reason of such omission. If the Company was by the statute bound to make the report called for by the 12th section, before the expiration of a year from the time of their formation, and within 20 days after the first of January ensuing their formation without regard to the time of their creation, then I think the allegations in the complaint are sufficient, and that the demurrer was not well interposed. The word "annually" in the 12th section must be construed to mean and as if written *every year*, and to relate to the first day of the Statute year (2nd Rev. Stat. p. 11, 4th ed.), and not to the annual or yearly existence of the Company. Any other construction would defeat the object of the statute to secure a yearly statement of the condition of companies formed under it, inasmuch as a company erected in February of one year would not be bound to report until the second January ensuing, after such creation and for the reason that the report is not to be made within 20 days after the first January, and not within 20 days after the annual existence, and on such construction would not be due prior to the time first named.

The allegation that the defendant and others named in the complaint signed the certificate by which the declared that the concerns of the first year were to be managed by them, and that those persons and the defendant were the trustees at the time of the performance of the labor in pursuance of the contract set out, coupled with the fact that the first year had not expired, when the cause of action accrued against the Company, namely, March, 1854, is a sufficient statement of the fact that the defendant was a trustee at the time such indebtedness so accrued. The word year used in the act means three hundred and sixty-five days, (2 R. S. p. 1, 4th ed.) In all other respects the complaint seems to be unquestionable, and the demurrer must be overruled and judgement given for the plaintiff, with liberty, however, to the defendant to answer within 20 days on payment of the costs of the demurrer.

G. W. MORRILL.

G. B. BOWERS.

## MORRILL &amp; BOWERS,

(Successors to and members of the late firm of C. W. SON &amp; CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

## Railroad Cars of Every Description,

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Watson, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

ap16



### THE WAGON ROAD TO CALIFORNIA.

ROUTES TO BE PURSUED—SOUTHERN BOUNDARY OF KANSAS.

WASHINGTON, April 1.—Of the three wagon roads provided for by the act of the last Congress, that lying between Fort Defiance, New Mexico, to the Colorado river, near the mouth of the Majave (which river is the eastern boundary of California at that point), is not required to be constructed by contract, as are the others, although the work will be performed under the direction of the Secretary of the Interior. This road is about four hundred miles in length, according to the information of gentlemen who are acquainted with the geography of the country, and for the construction of which the \$50,000 appropriated by Congress is deemed to be sufficient. It is important by reason of its connection with Missouri or Arkansas.

Early in May a large body of troops, under the command of Lieut. Col. Johnson, 1st Cavalry, will start from the western boundary of Missouri, on the parallel of 37, to run and mark the southern boundary of Kansas to the eastern boundary of New Mexico. The country over which that line passes is mostly prairie, well watered, and presents but few obstacles to travelers. The wagons necessary to carry supplies for the troops, heavily laden with provisions and stores, will compel the commander of the party to improve the crossing of the streams and level steep descents, to make a comparatively easy way for the trains. Thus it is conjectured there will be a good wagon way constructed from Western Missouri to the eastern boundary of New Mexico. Before reaching the latter the parallel of 37 crosses the great trail leading from Independence to Santa Fe, which has been traveled for more than thirty years. After striking this trail there is a good road leading to Santa Fe or Albuquerque.

Fort Defiance is situated from one hundred and fifty to two hundred miles westward of those places, from either of which there is a road over which the supplies for troops at the fort have been transported, and which is pronounced by officers of the army who have traveled over it, a good wagon road. During a year of scarcity in New Mexico the commandant at that military post was compelled to go westward of the fort from one hundred and fifty to two hundred miles, to the villages inhabited by the Moquia Indians, who raise larger supplies of grain than they consume, and are peaceable and inoffensive.

Thus, when the southern boundary line of Kansas shall have been surveyed, there will be a good wagon road on this route, without much labor, to these Indian villages, which are only distant two hundred and fifty miles from the terminus of the Fort Defiance and Colorado wagon road. It is expected that orders will soon be given, and by mid-summer men employed in its construction, and that the road can be constructed to the Colorado river, and the report of the superintendent be received in time to be presented to Congress early in the next session.

From the west bank of the Colorado river there is good grazing and water, and it is believed that the line of road will proceed up the Mojave river to its source, near the Tagon Pass. That portion of the road from the head of the Mojave river, through the Tagon Pass, to the head of the San Joachim river, has already been traveled by the wagons of the settlers in the neighborhood of that Pass. On this line of road, from one hundred and fifty

miles west of Missouri, lies the country inhabited by the Cherokee Indians, who raise a surplus of all agricultural products; and about one hundred miles east of the River del Norte the New Mexico settlements appear.

It is said that this route can be traveled as well in winter as in summer.

From these statements it appears that by next winter there will be a good wagon road to the State of California, irrespective of the other two—the Fort Kearney and El Paso—for which the act of Congress makes provision.

### NEW ORLEANS & OPELOUSAS R. R.

The fifth annual report of the New Orleans, Opelousas, and Great Western Railroad has been published. The assets for building the road have, up to this date, reached \$2,600,000, and eighty-one miles have been finished, with eleven miles of side track and three costly bridges. The company have lands at Gretna: swamp lands enough for all the timber they may need; depots at Algiers, Des Almandes, Lafourche, Terrebonne, Tigerville, Bayou Boeuf, and will have one to build at the bay, with spacious wharves at the termini of the road, at a cost of about \$200,000, and a full equipment at a cost of \$237,000. Beyond the credits yet unrealized and the stock of material on hand amounts to \$713,535.

The following are the results of the last year's business:

The gross earnings of the passenger trains in 1856 amount to.....	\$84,293 48
In 1855.....	55,316 11
Increase.....	27,977 37
Or about 49½ per cent.	
The gross earnings of the freight trains the past year were.....	\$122,071 95
In 1855.....	59,979 62
Increase.....	\$62,092 34
Or about 103½ per cent.	

The transportation expenses of the passenger trains (\$22,230 68) are equal to about 26½ per cent. of the gross earnings, and of the freight trains (\$72,426 87) equal to 59½ per cent. The total expenses on the whole gross earnings of passenger and freight trains, taken together, amount to 43½ per cent. A very large increase of business may be carried on, particularly in passengers, with very little additional expenses, and this important advantage we may reasonably expect to realize the coming year.

Speaking of the importance of the Texas trade, engineer Bayly says:

"The commerce, the trade of New Orleans requires that the immense business of Texas should be secured to her, particularly when it is certain to be directed by other and rival routes to the West and North, unless the Opelousas road is so constructed as to make it the interest of Texas to ship to and trade with New Orleans. This can only be effected by affording the shortest and most direct route from Texas to New Orleans; thus cheapening the cost of transportation and gaining time. These conditions are gained by building your road to the Sabine on the route for it mentioned, viz: from Opelousas to the Sabine at Thompson's Bluff, about four and a half miles below the parallel of latitude 31 degrees north. The whole distance from New Orleans to the Sabine will be about 257 miles. Between New Iberia and Sabine, by this route, the road can be built for less than \$15,000 per mile, including iron, track-laying, cross-ties, &c.; or for everything except equipment. It will be apparent at a glance on the maps of Louisiana and Texas, that you will by this route connect New Orleans with the whole of Texas. From the Sabine, at the proposed crossing, roads might diverge north, northwest, west, southwest and south, and thus penetrate every portion of Texas, and tap every road which is or ever will be built in that great State. No part of Texas will be unconnected with you, and

roads are already chartered which will effect this. To strike Texas near latitude 32 degrees would connect you only with northern Texas, and inasmuch as roads are now being built and somewhat advanced, connecting the seacoast with northern Texas, it is manifestly better to tap such roads by a short and cheap line, than to attempt to reach northern Texas by first traversing the whole of Louisiana at a cost of from five to seven millions.

### MEMPHIS & CHARLESTON R. R.

This important road is at last completed, and cars are running its entire length. As a grand trunk road, running east and west, from the Mississippi to the Atlantic, its importance cannot be over-estimated. Memphis, Charleston and Savannah, its grand natural termini, will reap the benefits of their efforts for this great arterial line, and share in the general prosperity which railroad development always creates.

The following is a letter from the President of the road, in Memphis, to a gentleman in Charleston:

MEMPHIS, March 20, 1857.

Dear Sir:—The object for which I have so long labored will be realized about the 28th inst. On that day I expect to lay the last rail on our road, connecting, as it will (for the first time), the Atlantic with the Mississippi valley, south of the Ohio, by railroad. It is gratifying to me to see this cherished object so near at hand, as I doubt not it must be to every friend of the South, but peculiarly so to me, as I have shared so much of its toils, responsibilities and anxieties. I have seen it in all its phases, and dark and gloomy oft times have been the clouds that lowered above us; but I rejoice that they are fast fading away, and I see the sunshine as it breaks forth in the east. Amidst all my trials, I have looked to your noble city and whole-souled people as my stay and my help in time of need, and they have never deserted me in my hour of trouble. I shall ever hold her and them in most grateful remembrance. Our first rail was laid April 1, 1852—our last rail will be laid before April 1, 1857, within five years from the commencement; having put in operation over fifty-seven miles of road per annum from the day we began until we finished. We have paid promptly every draft upon our treasury, and the man does not exist who can say *honestly* that we have not dealt justly by him; and this is a source of more real gratification to me than my success.

Our city is going to have a grand jubilee on the 1st and 2d of May, in commemoration of the completion of the Memphis & Charleston Railroad, at which time I shall expect to see you and many other Charleston friends. Can't you bring over a hoghead of salt water and mix with the father of fresh waters, and we will return you a hoghead of fresh to mix with the briny deep. Yours truly,

Savannah is now within forty hours' travel of Memphis, and Charleston is about the same distance.

SAVANNAH, ALBANY & GULF R. R.—The grading on this road to Altamaha, fifty-one miles, is entirely completed, and the cross-ties are nearly all on the ground.



# The Great Arnold Secret Discovered at Last!

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



For Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes. **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Reiter to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.  
or SUMNER SMALL, Boston, Mass.

ap8

### Thorough Bred Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,  
"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

T. WRIGHTSON.

### TO PRINTERS.

### Large Cylinder Hoe Press FOR SALE.

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once.

Address WRIGHTSON & CO.,  
167 Walnut street, Cin'tl, Ohio.

N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.

ap8-Im

W. & CO.

### ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

**Blank Book Manufacturers,**  
No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST,) 112, Main Street, Cincinnati.

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 228 H Street, Washington, D. C. apr12

### FOR SALE.

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

ap8-Im

WRIGHTSON & CO.,  
167 Walnut street, Cin'tl, Ohio.

### SILVER, GOLD, LEAD, And Other Minerals, ON THE PROPERTY OF THE Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'tl, O.

### Norris' Locomotive Works.



PHILADELPHIA.

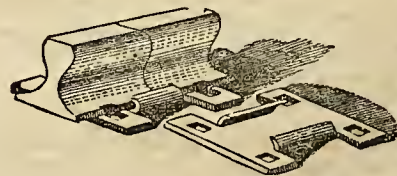
ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

Jy.27.

RICHARD NORRIS & SON.

### RAILROAD SPIKES.



WROUGHT IRON

### Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c. &c.

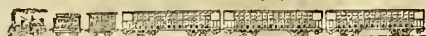
The best quality of refined iron is used, and all orders filled with dispatch.

J. HOPKINSON SMITH,  
No. 25, South Charles st.

Please direct the name in full.  
Baltimore August 31-7



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12.30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6.30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton.

St. Paul Steamer leaves Racine for Chicago every evening at 10.30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President,  
ROBERT HARRIS, Ass't Sup't. aug14

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



### Manufacturers of all kinds of Railroad MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

### BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding to excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEB & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, hnlts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
Louisville and Frankfort Railroad.

apr2

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

### VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [Jan-1y] Agent.

## PRATT & FREEMAN.

### PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St., PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Candlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-1y

## E. MENDENHALL,

## MAP, BOOK & PRINT SELLER,

Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES

### DRAWING INSTRUMENTS, &c.

Publisher of the

### Railway Map of the Western States,

In Sheet or in Pocket Case;

THE LARGE SECTIONAL AND RAILWAY MAP OF OHIO THE LARGE MAPS OF CINCINNATI, AND HAMILTON Co. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

### MAPS OF EVERY DESCRIPTION.

mh22

## Important to Railroad Companies, etc.



### Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

### RAILROAD FROG-POINTS,

### Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT.

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

### ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOY'S METALLIC SELF-ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

Nov

64 Broadway, N. Y.

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

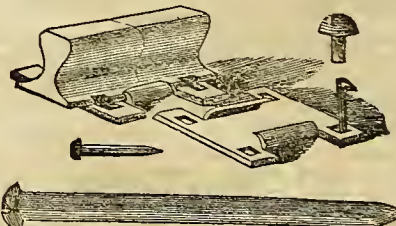
RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mar1-1y

### GREAT WESTERN

## Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns. Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

feb. 28

CORBY, GOSSIN & CO.



## Most Direct Route to the East.

# BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bat Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

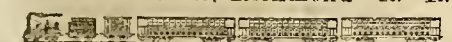
**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute & Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

cc33-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

### THROUGH TICKETS VIA.

WHEELING. PITTSBURGH. DUNKIRK. BUFFALO. NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

### TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburg in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	26 "
To Washington in.....	29 "
To Steubenville in.....	1 "

### FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

### FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L.

Office No. 2 Burnet House.

Jan 2

1856.

1857.

Spring Arrangement.

1857

## Cincinnati, Hamilton & Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

### FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

### SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Cledo or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

### "STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

### FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

### THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

### FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburg Philadelphia, &c. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

### RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M. and 5:30 P. M. For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU & INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Latayette.

Passengers coming South from T. W. & W. R. R., make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Frtght. Ag't.

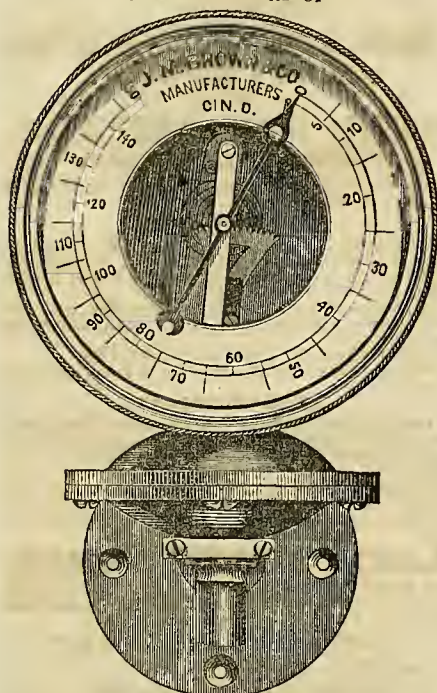
Indianapolis, Sept. 16, 1856.

[mh29-Iv.



**J. M. BROWN & CO.,**

MANUFACTURERS OF


**IMPROVED**  
**Corrugated Steel Spring Gauges,**

FOR

**LOCOMOTIVES AND STATIONARY ENGINES.**

THIS Gauge is so constructed that when riding over rough roads the indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

250 East Front street, Cincinnati, O.


**Prosser's Patent**  
**LAP-WELDED**  
**IRON BOILER TUBES,**

Every article necessary to

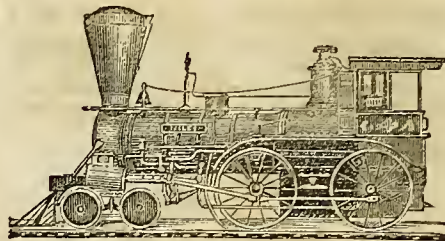
**DRILL THE TUBE-PLATES**

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**

82 PLATT STREET, New York.

**LOCOMOTIVE WORKS.****NILES & CO.,**

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1853-6m.

**RAILROAD IRON.**

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON &amp; CO.

New York, Ap 3, 1856. 9 South William Street.

**A. B. LATTA'S****Patent Mercurial Steam Gauge,**

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

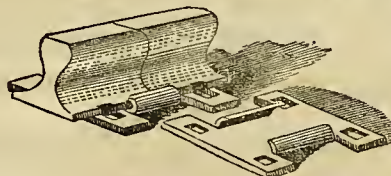
We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

apl7

A. B. &amp; E. LATTA.

J. O. GREEN.

C. S. GREEN.

**CINCINNATI RAILWAY****CHAIR WORKS,**

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

**J. B. GREEN & BRO. PROPRIETORS,**

WE have in use improved machinery, capable of turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

**Wrought Iron Chairs,**

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

J. B. GREEN &amp; BRO.

Feb. 14 1y.

**THE SCHENCK**  
**MACHINERY DEPOT**

AND

**Leather Banding Manufactory,**

No. 163 GREENWICH STREET,

NEW-YORK,

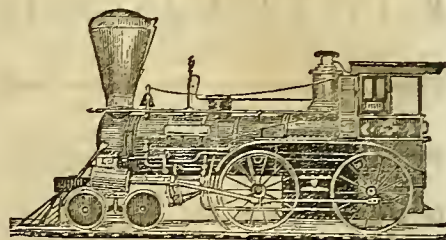
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties, Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

**Oak-tanned Leather Belting,**

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

**CINCINNATI**  
**LOCOMOTIVE WORKS.**


The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE &amp; RICHARDSON.

**Railroad Car Findings**

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, and Washers,

Eagle and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS,**

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

**Cotton Duck for Car Covering,**

Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trim-  
mings for windows and Seats. Varnish, Coach Japan  
and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport &amp; Bridges, Car Manufacturers,

Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges &amp; Co., Fitchburg, Mass.

†oc6.

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

**Sole Manufacturers of McGowan's Double Action**  
**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855 1

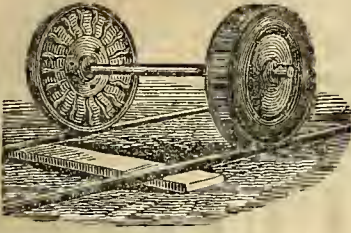


### FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

### WASHBURN WHEEL

Having obtained the exclusive right to make this wheel



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight-wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL.

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
janl. Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,  
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* JOSEPH DAVENPORT.

### S. C. THOMSON & CO MANUFACTURERS OF

PATENT PAD LOCKS,  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2+ NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed; the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of ALBERT M. SMITH, Patentee and Manufacturer, dec20-ly 13 North St. Paul st., Rochester, N. Y., or TAULMAN & LOW, 157 Broadway, N. Y.

### ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

D. D. MILLER,  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by E. MENDENHALL,  
31, '55 3 College Hall, Cincinnati O.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by  
VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

### THOMAS D. STETSON, Mechanical Engineer, AND AMERICAN AND FOREIGN PATENT AGENT, No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc23

### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (5th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
President of the Board.

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by  
VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

feb19-1m

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

THEODORE DEHON,  
no13 10 Wall st., near Broadway, New York.

### IRON BOILER FLUES, PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA. [aug

### RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GOODMAN & CO.,  
no. 7 Wall st., N.

### RAILROAD CAR AND

### COACH TRIMMINGS. DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

### IMPORTERS

OF  
Plain and Figured Mohair Plush,  
Printed & Uncut do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars;

ROPE MATTING, Every Width;  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

### PATENT FELT.

FOR CUSHION & MATTRESS FILLING  
N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON.

### RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

jc4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

**T. F. RANDOLPH & BRO.,  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.**

**Patent Self-Adjusting Lantern!**  
THE MOST APPROVED LANTERN FOR  
**RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

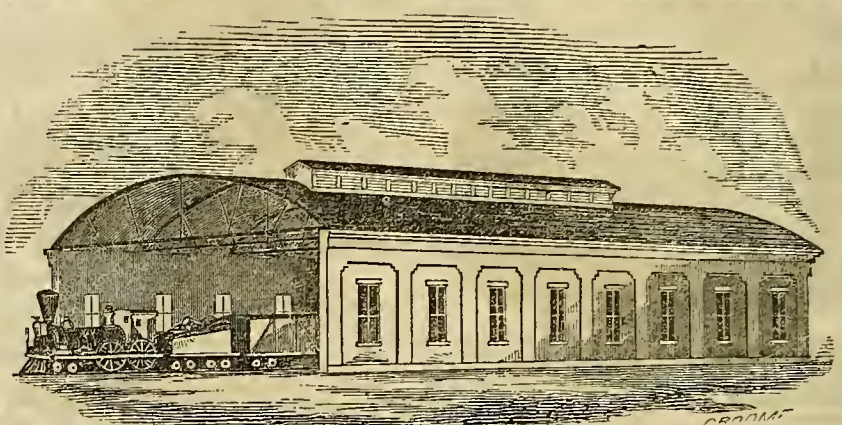
BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-ly 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



**Office, No. 57 West Third Street,  
CINCINNATI, OHIO.**

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of iron supporting now in use, and no more than good wooden trusses; besides, this plan of roofing gives a fine architectural appearance. Is *all* iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

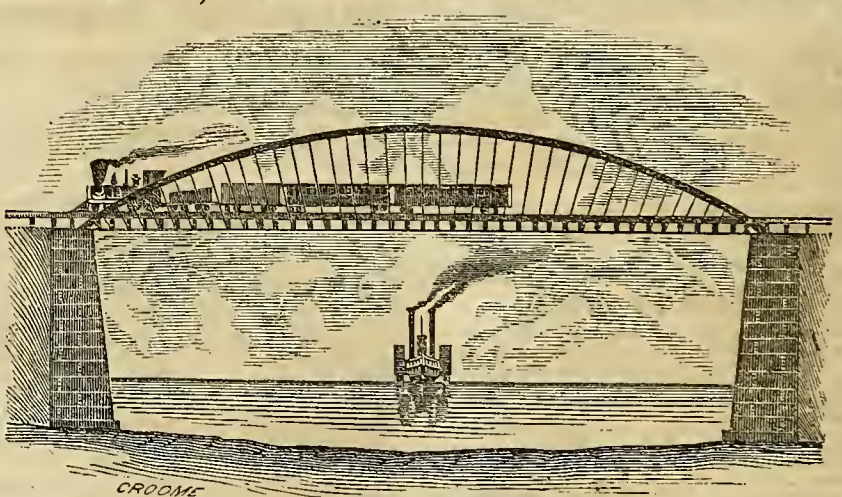
MOSELEY, WINSTON & MOSELEY.

January 1st, 1856.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *tube iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by responsible obligations.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

**THOS. W. H. MOSELEY.**

Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, }  
W. WRIGHTSON, } Editors.

CINCINNATI:

THURSDAY MORNING,.....APRIL 23, 1857.

# Railroad Record

PUBLISHED EVERY THURSDAY MORNING,

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS—	
One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	100 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers, and Proprietors,

## CONTENTS.—NO. 9.

### EDITORIAL.

Land Culture and Land Speculations in the United States.....	129
Sonora Exploring and Mining Company.....	129
Brevities.....	130

### RAILROAD DAGUERRETYPE.

Sacramento Valley R. R.....	130
Alexandria Loudon & Hampshire R. R.....	131
Champlain & St. Lawrence R. R.....	131
Central Ohio R. R.....	131

### RAILROADS.

Cleveland, Columbus & Cincinnati R. R.....	131
Illinois Central.....	132
Lexington & Danville R. R.....	133
Cincinnati & Mackinaw R. R.....	138

### MISCELLANEOUS.

Ways to the South Sea.....	134
Overland Route to California.....	138
Earnings.....	131, 134

### MONEY AND STOCKS.

Table of Stocks and Bonds.....	136
London Quotations.....	137
Cincinnati Stock Sales.....	137
Monetary and Commercial.....	137
Sales at the New York Stock Board.....	137

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

## BUSH & LOBDELL,

Wilmington - - - - - Delaware.

MANUFACTURERS OF

## CHILLED WHEELS

AND

## TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Ext. nt

FOR THEIR

## CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Vol. 5.—No. 8.

## LAND CULTURE AND LAND SPECULATIONS IN THE UNITED STATES.

We live in a time of extraordinary land speculation. Never before was there known such an exodus of farmers to the new lands of the west. Never before has Government given away such quantities of land. Never were so many acres in the market; and never were prices of *wild land* so well maintained. To experienced eyes all this tends to one result, which sooner or later must come—a bursting of the great land bubble. We mean of the bubble which has been created by making new towns on the frontiers, and selling new lands at the price of cultivated farms.

In this state of things it will be well to examine the *elements* on which the price of land and the improvement of lands depends.

1. In 1850 we had the actual population of the United States, and the actual amount of land cultivated, and the amount of products. The amount of products, deducting seed, give a surplus for export of only about 10 per cent. We may fairly conclude, then, that the amount of land in *culture* was about equal to what was needed, and what the people, in their present state of cultivation, are about to need, relatively, in the future. We may assume, then, that the amount of *cultivated* lands cannot increase much more rapidly than the population. In all probability it cannot increase so fast; for the tendency of population now is to towns; so that the proportion of agricultural population is diminishing. So, also, it is evident that the amount of *land sold* cannot safely exceed the same ratio, although it will be absolutely much larger. It cannot exceed the same *ratio*, because the only *real ultimate demand* is for farming land, and if that ratio of increase be exceeded the demand ceases, the price falls, and land becomes a drug.

2. Let us now deduce these elements from the known statistics of the country. In 1850 the results were as follows:

Population.....	23,191,876
Cultivated land, acres.....	113,032,614
Uncultivated land.....	180,328,000
Whole amount of land owned by individuals.....	293,560,614
Ratio of decennial increase of population.....	3½ per cent.

According to this we have the following annual *increments* of population and cultivated lands:

Annual increase of population.....	808,000
Increase of cultivated land, acres.....	3,955,000
Increase of uncultivated land, acres.....	6,817,000

Aggregate.....10,272,000

Ten millions of acres per annum is the total demand for land at the present time. It is an ascertained fact. It is the precise *demand*, and no more. A great deal more may be sold; but, if so, it must sooner or later overstock the market. Such we hold to be the case now, beyond question. In the year 1854 the sale of Government land amounted to 7,000,000 of acres, and the land warrants to a million more. Since that, in 1855 and 1856, the amount disposed of has amounted

to double that. To this we must add a million or two of acres disposed of by railroads. Thus we find that the annual sale of lands by the Government (including the land warrants) is from 50 to 100 per cent. beyond the *actual demand*. When we take this fact into view, in connection with the other facts, that population now tends to the towns, and that the foreign immigration is now diminished, we can see at once that there is a great land speculation on hand. When we come to town lots, the land bubble is utterly undefinable and indescribable. Towns are laid out in Kansas and Nebraska at every half dozen miles, and each one of them is, of course, destined to be the New York of the West!

This land speculation is no new thing, nor is its result. It has universally resulted in the bursting of the bubble, and the prostration of sales, and a period of dullness for years to come. We do not certainly know that the crisis has come; but we see signs of the coming storm. Money is scarce in the country towns, where, at this time, it ought to be plenty. The people who go west are excited and fanciful; town lots are sold at prices at least four-fold the value if the towns were to grow as much as it is imagined they will.—These are signs not to be mistaken.

We write this not to decry the value of lands, but to point out the elements and signs of the times in regard to the great land speculations of the day.

## SONORA EXPLORING & MINING COMPANY.

We have been shown a specimen of the silver ore from the "Heintzelman Mine," recently opened by this company. It is rich, and will alone be a fortune to the company. In the dispatch of the Agent and Manager at Tubac, dated Feb. 11, he says: "Our mining prospects are going on prosperously. Upon further examination of the Cerro Colorado region, ten different veins have been discovered, almost equal to the first. The "Heintzelman vein" is a regular vein; it made a twist upon coming to the surface, but at ten feet the shaft found the disseminated veins at top converged to a wide, full, massive vein, with regular investing rock, and increased much in purity. An assay from ore now would yield probably 30 marcs to the cargo, or \$100 to the 100 lbs. of ore. This is unquestionably the richest vein in the territory."

In referring to the Arivaca Ranch, purchased in December last, the report says: "It is the finest estate in the territory—abundance of good pure water, plenty of timber, and the richest soil in the world; large quantity of arable lands, and pasturage for five hundred thousand head of stock; the only permanent water in a circle of fifteen miles, and mines that will not be exhausted in ten centuries. The land in cultivation and stocked will produce subsistence for several thousand laborers, and is immensely valuable."



This report makes the number of veins of silver now found and in possession of the company 61, and the yield from the ore nearly equal to *one dollar per pound of ore*. It will be observed, also, that the intelligent and enterprising Agent of the company has also secured what will hereafter be found in this section a great desideratum—sufficient arable land to supply with provisions all the laborers that the company may hereafter see fit to employ. With these advantages, in mineral and agricultural possessions, with the additional advantage of priority of possession, and with intelligent and skillful management, the Sonora Exploring and Mining Company cannot fail to be a highly important enterprise, and is well worthy the attention of those who are seeking investments.

#### BREVITIES.

—MEMPHIS & CHARLESTON R. R.—The City Council of Memphis have appropriated three thousand dollars towards defraying the expenses of the celebration of the completion of this road, to take place on May 1st and 2d.

—NASHVILLE & HICKMAN R. R.—The citizens of Hickman held a meeting in favor of this road on the evening of April 4.

—MCGREGOR, ST. PETER & MISSOURI R. R.—This is the Iowa extension of the Milwaukee & Mississippi R. R., now near its completion to the town of Prairie du Chien. It was stated at a public meeting held in the town of McGregor, opposite Prairie du Chien, that 140 miles of the line have been fully surveyed, \$700,000 subscribed in cash, farm mortgages and county bonds, and the line of the road as far as Clear Lake (140 miles west of McGregor) contracted on favorable terms, to be built in two years. So satisfied was the meeting with this exposition, that the project of taking \$200,000 in the stock of the company, and issuing county bonds therefor, to run twenty years, met with an enthusiastic and unanimous response.

—MILWAUKEE & БЕЛОIT R. R.—A large and spirited meeting of the friends of this road was held in Milwaukee on the evening of April 13.

—KENTUCKY RIVER NAVIGATION.—The Kentucky papers are advocating the improvement of the navigation of the Kentucky and Licking rivers. They claim that the development of the mineral resources of the State would more than compensate for the expenditure.

—CHARTIERS VALLEY AND HEMPFIELD RAILROADS.—The *Pennsylvanian* of April 17 says: "The stockholders of the Chartiers Valley and Hempfield Railroads met on Thursday last—the former in Pittsburg, and the latter in Washington, Pa., for the purpose of accepting or rejecting the act of the Legislature, passed on the 16th of March last, for the consolidation of these roads under the

title of the Ohio Valley Railroad. The Hempfield Company accepted the act by a vote of 32,819 shares against 731, but the Chartiers Valley Company, after considering the whole question, virtually rejected the proposition, notwithstanding its earnest advocacy by Gen. Moorhead and others largely interested in the success of the Chartiers Valley Road. It was urged that the Hempfield Road, crippled as it is, could be finished to Wheeling for \$100,000, while it will require \$400,000 to finish the Chartiers Road. The following resolutions were finally adopted, and the meeting then adjourned until again called together by the Board of Directors:

*Resolved*, That the further consideration of the question of the consolidation be postponed until such action be obtained as may release the consolidated road from all obligations of the company to complete the Hempfield Road from Washington to Gettysburg, and it may be ascertained whether said consolidation would interfere with or invalidate the contract now existing between the Chartiers Valley and Steubenville Railroad Companies.

*Resolved*, That the Board of Directors of the Chartiers Valley Railroad Co. be directed to endeavor, by all possible means, to secure the completion of said road by means of the preferred stock and mortgage bonds of said company, on the most favorable terms they can.

—CINCINNATI, HAMILTON & DAYTON R. R.—This road is laying a track to connect its line with that of the Ohio & Mississippi Railroad.

—ILLINOIS RIVER BRIDGE AT PERU.—The Legislature of Illinois has passed an act authorizing the construction of a bridge across the Illinois River at the town of Peru.

—PEORIA & HANNIBAL R. R.—This road has been put under contract from Peoria down to the Fulton line—twenty miles. The contractors are Messrs. Decker & Warner of Rock Island.

—MEMPHIS & CHARLESTON R. R.—The laying of the last rail on this great work was signalized with a grand excursion from Memphis to Stevenson, in Alabama—270 miles. The *Memphis Bulletin* of April 3d says: "Today is a memorable period in the history of Memphis. It is set apart as the time for laying the last rail on the Memphis & Charleston Railroad, and passing through the train to Huntsville and the entire length of the road. It is the day of completion of this great enterprise, first projected by the late Major-General Edmund P. Gaines; put into practical progress by the eloquent genius of Hon. James C. Jones; and finished under the indomitably energetic management of Sam Tate. It is a great day—a day whose setting sun will glance back through the first open way made on southern soil in the barriers which have separated the great Atlantic from our mighty "inland sea," the Father of Waters—and our people do well in going up to witness and celebrate the event."

## Railroad Daguerreotypes.

No. LXXVI.

### SACRAMENTO VALLEY R. R.

The report of this road is dated March 1, 1857. The following are its officers:

President—Col. J. B. CROCKETT, San Francisco.

Secretary and Treasurer—H. R. PAYSON, San Francisco.

Superintendent—J. P. ROBINSON, Sacramento.

#### DIRECTORS.

J. B. CROCKETT,  
W. T. SHERMAN,  
R. S. FRETZ,  
J. R. ROLLINSON,  
WM. FREEBORN,  
T. F. MOSS,  
WM. PALMER,  
Gov. J. NEELY JOHNSON,  
J. P. ROBINSON,  
H. R. PAYSON,  
J. B. BAYERQUE,  
ED. W. FLINT.

The ANNUAL MEETING of the stockholders is held on the second Tuesday in November.

The CAPITAL STOCK is as follows:

Number of shares.....	10,000.
Price per share.....	\$100.
Capital.....	\$1,000,000.

The DEBTS of the road are:

1st mortgage.....	\$400,000.
Interest.....	10 per cent.
When due.....	1875.
Interest payable.....	1st Jan. and 1st July.
Trustee.....	Henry Chauncey.
Trust mortgage.....	\$170,000.
Interest.....	7½ per cent.
When due.....	1858.
Trustees.....	Chas. Moran & J. Mora Moss.
Floating debt.....	\$20,000.

#### RUNNING EQUIPMENTS.

Number of Locomotives.....	4.
Passenger cars, 1st class.....	6.
Baggage ".....	2.

The following are the results of operation for the year 1856. Fiscal year ends Dec. 31:

#### RECEIPTS.

Passengers.....	\$130,034 67
Freight.....	40,234 14
Express.....	3,075 00
Cost of operation.....	\$90,552 88

#### DETAILS OF CONSTRUCTION.

Length of road.....	22 miles.
Termini.....	Sacramento and Folsom.
Gauge.....	5 feet.
Single track.....	22 miles.
Sidings.....	2 "
Length of rail-bars.....	15, 16, 17 and 18.
Weight per yard, rail.....	59 lbs.
Kind of iron.....	Welch.
When laid.....	Aug., 1855, to Feb., 1856.
Kind of rail.....	T.
Ties.....	2350 per mile.
Kind of wood.....	California Red Wood.
Length.....	8 feet.
Size.....	6 by 8 inches.
Fuel.....	Oak.
Amount per annum.....	1,500 cords, at \$2 75 per cord.

Telegraph on road.

Mileage of Passengers.....	10c.
" Freight, per ton.....	15c.
Total travel.....	90,000



Distance traveled by one person, miles, 1,800,000  
Total tonnage freight.....20,000  
Tons transported one mile.....400,000

The road is peculiarly located, being across a very level valley, from Sacramento, the capital of the State, to the gorge of the American River, immediately under the Sierra Nevada Mountains. At that point the mining districts concentrate by stages, and heavy teams for freight, for a distance of 125 miles, bringing about 100,000 people tributary to this road. The prospective business for this, the second year, is net \$130,000. It will not fall short of that.

## No. LXXVII.

## ALEXANDRIA, LOUDOUN &amp; HAMPSHIRE R. R.

## OFFICERS.

President—LEWIS MCKENZIE.

Treasurer and Secretary—REUBEN JOHNSTON.

## DIRECTORS.

JAMES McILHANY,  
CASSIUS F. LEE,  
DAVID FUNSTEN,  
JOHN POWELL,  
R. E. BYRD,  
PROVINCE McCORMICK,  
JOHN JANNY.

The ANNUAL MEETING of the stockholders is held on the first Tuesday in September.

The CAPITAL STOCK of the road is as follows:

Number of shares.....50,000.  
Price per share.....\$100.  
Capital.....\$5,000,000; 600,000 subscribed.

Length of road.....173 miles.  
Termini.....Alexandria, Va., and Piedmont, Va.  
Gauge .....4 feet 8½ inches.

Construction recently begun; 40 miles now under construction and 63½, in all, under contract.

## No. LXXVIII.

## CHAMPLAIN &amp; ST. LAWRENCE R. R.

The report of this road is dated Nov. 22, 1856.

The following are its officers:

President—A. M. DELISH.

Secretary—W. A. MERRY.

## DIRECTORS.

HON. JOHN MOLSON,  
JOHN CARTER, V. P.,  
WM. WORKMAN,  
THOS. RYAN,  
BENJ. BREWSTER,  
H. RUSSEL,  
CHAS. S. PEIRCE,  
WM. MACDONALD.

The ANNUAL MEETING of the stockholders is held on the third Monday in January.

The CAPITAL STOCK is as follows:

Number of shares.....4,354.  
Price per share.....\$200.  
Capital.....\$1,872,800.  
Am't of last dividend...10 per cent.

The DEBTS of the road are:

1st mortgage.....\$577,187.  
Interest.....6 per cent.  
When due.....1872.  
2d mortgage.....\$192,200.  
Interest.....7 per cent.  
When due.....1874.  
Domestic.....\$100,000.

Interest.....7 per cent.  
When due.....1860 to 1866.  
Floating debt.....\$131,100.  
Interest.....6 per cent.  
When due.....Within 9 years.  
Total indebtedness.....\$1,001,087.

## RUNNING EQUIPMENTS.

No. of locomotives.....11.  
Passenger cars, 1st class 8.  
" " 2d " 4.  
Freight " .....120.  
Express " .....4.

The following are the results of operation for the years 1854 and 1855:

	1854.	1855.
Total receipts.....	\$164,000	\$168,200
Cost of operation.....	92,000	88,500

Net earnings, 1855.....\$79,700

## DETAILS OF CONSTRUCTION.

Length of road.....43 miles.  
Termini.....St. Lambert, or South Montreal, and Rouse's Point.  
Gauge.....4 feet 8½ inches.  
Single track.....43 miles.  
Sidings.....2 "  
Length of rail-bars.....15.9, 18 and 20.3 feet.  
Weight per yard, rail.....56 lbs.  
Kind of Iron.....English.  
When laid.....1851 and 1852.  
Kind of rail.....T.  
Ties.....Tamarac.  
Length.....8 feet.  
Size.....5 by 10 inches.  
Ballast used.....Gravel.  
Kind of fuel.....Maple, Birch, Tamarac, Beech and Hemlock.

Amount per annum.....10,000 cords.  
The cost of two iron steamers and extension docks at the termini are included in total cost of road.

## CENTRAL OHIO R. R.

At present it is thought inadvisable to furnish the information requested.

WM. KING, Secretary.

PENNSYLVANIA MAIN LINE.—A correspondent of the Philadelphia Pennsylvanian gives the following statement of the Main Line of Public Works in that State from the date of its commencement up to the close of the last fiscal year, together with the original cost of construction:

	Receipts.	Expenditures.
Columbia Railroad. From 1833 to 1856.....	\$10,651,897 29	\$7,142,743 40
Portage Railroad. From 1833 to 1856.....	3,636,630 93	4,803,442 80
Main Line Canal. From 1833 to 1856.....	5,081,101 44	3,923,189 86
Total.....	\$19,369,629 66	\$15,869,380 06
Excess of receipts over expenditures.....	\$3,500,249 60	

COST OF CONSTRUCTION OF MAIN LINE.

Columbia Railroad.....	\$5,277,278 44
Portage Railroad (Old).....	2,708,672 12
" (New).....	2,100,027 27
Main Line of Canal.....	6,749,398 47
Total.....	\$16,835,376 30

Expenses over receipts.....\$13,335,136 70  
There are expenditures not included in the above; such for instance, as the payment of claims last year amounting to over \$130,000.

## ALLEGHENY VALLEY R. R.—FIRST QUARTER OF 1857:

	Passengers.	Freight.	Total.
January.....	\$3,060 85	\$4,373 20	\$7,434 05
February.....	3,375 96	1,981 02	5,356 98
March.....	4,714 67	2,089 02	6,803 69
Total.....	\$11,151 48	\$8,443 24	\$19,594 72
Mail service, quarter ending 1st April, '57....			787 50
Earnings first quarter 1856.....			\$20,382 22
Increase (36 per cent.).....			\$5,516 60

R. B. LOOMIS, General Agent.

## Railroads.

## CLEVELAND, COLUMBUS &amp; CINCINNATI R. R.

We give below copious extracts from the Annual Report of this well-managed road for the year 1856. A comparison of the results of passenger and freight traffic, as given from careful data, will show that even on this great passenger thoroughfare the earnings of the freight department have been nearly double those of the passenger department, and that the per centage of expenses on the freight department was 147-100 per cent. less than on the passenger department. This is probably owing mainly to the slower speed observed by the freight trains, and is a significant fact. It only corroborates what we have constantly affirmed before—that railroads should charge passenger fare in proportion to the speed of trains. If the charge for passenger transportation on the mail train, at 15 miles per hour, is *two cents* per mile, that on the lightning train, at 25 miles per hour, should be twenty-five fifteenths of that charge, or three and one-third cents per mile. In this way the railroad will receive from those it carries a fair equivalent, and no more. We give the above as an illustration of the principle we advocate, not as an exact rule, as we suppose the increase cost in higher speeds is not in exact proportion to the increase of speed.

The Report of the President says:

"During the year just closed, your road has been operated with but few accidents, and none of a serious character. The expenses of operating are somewhat increased over the previous year, owing mainly to the wear and decay of rails, ties, cars, &c., and an increased freight traffic.

"In July last a contract was concluded with the Cleveland & Toledo Railroad Company for the use in common by that company of the tracks, grounds, passenger and freight houses, wood sheds, water tanks, &c., situate at and between Cleveland and Grafton, for the term of twenty years, with the privilege of renewal for a like term, for an annual compensation of \$66,000, payable monthly; that company also paying its equitable proportion of all expenses for the repairs, attendance and maintenance of tracks, buildings, &c. The revenue derived from this source appears in the account of earnings as rents, and somewhat decreases the gross receipts of the road derived from the east and west business.

"At the date of the last report some 44 miles of the main line of the road was without ballast. This has been completed, and the road is now ballasted throughout, with the exception of the Delaware curve. One gravel train will be required most of the coming year, in finishing up such parts as require a larger quantity of gravel, and to ballast the Delaware curve. About 40 miles of the main



line of the road has been relaid during the year with new ties; this, with what has been previously relaid, makes 104 miles of new ties. The remaining part of the road (about 31 miles) will require relaying during the next two years.

"The compound rail with which the second track is laid has proved less serviceable than was anticipated at the date of the last report. It is almost worn out, and will require re-rolling and relaying within the next eight months. This, with renewals required on the old track, will somewhat increase the expense of track repairs the ensuing year.

"The length of track now in use is as follows:

	Miles.
Main line, first track.....	135.39
" second track.....	38.80
Delaware curve.....	5.77
Sidings.....	19.75

Total length of tracks.....	199.71
The gross earnings of the road are.....	\$1,329,754 77
Expenses for all purposes.....	628,919 89

Showing net earnings of.....	\$700,804 88
Out of which dividends have been declared and paid, and to be paid, as follows:	
July 1st, dividend 5 per cent.....	\$236,935 00
January 1st, dividend 6 per cent.....	284,454 00
	521,389 00

Leaving a surplus of.....	\$179,415 88
Of which there has been expended and charged to construction account, for	
Ballasting, side tracks and station buildings..	\$55,379 45
Locomotives and cars.....	62,524 45
Total.....	\$117,903 90

The assets and liabilities of the company, as shown by its books on the 31st December, are as follows.

ASSETS.	
Roads and depots.....	\$4,049,677 59
Equipments.....	681,949 19
Land not used for roads and depots.....	13,589 57
Advances to C. & M. R. R. Co.....	24,000 00
" on account lake steamers.....	54,000 00
Telegraph stock.....	3,000 00
Columbus & Xenia R.R. stock.....	5,550 00
Delaware county bonds.....	6,000 00
Indianapolis & Bellefontaine R. R. stock..	70,000 00
Bellefontaine & Indiana R. R. stock.....	60,000 00
Columbus & Xenia dividend bond.....	200 00
Balances of account due from agents and other companies.....	59,012 08
Cash in hands of Treasurer.....	298,566 96
Due from joint account with C. P. & A. Road.....	26,280 28
Bills receivable.....	26,556 62
Material on hand in repair shop.....	27,678 99
Rails, chairs, spikes and ties on hand for repairs.....	35,123 70
Fuel on hand.....	29,863 60
	\$5,491,048 58

LIABILITIES.	
To stockholders, capital stock.....	\$4,741,220 00
Convertible bonds.....	43,000 00
Non-convertible bonds.....	2,000 00
do do past due.....	1,000 00
Franklin county bonds assumed.....	50,000 00
Bills payable.....	7,089 40
Dividends unpaid.....	7,424 87
Dividend No. 11, due January 1st.....	284,454 00
Surplus earnings.....	354,460 71
	\$5,491,048 58

The Report of the Superintendent gives the following additional particulars:

"The receipts for freight amount to \$827,311 87. The number of tons transported was 347,008 1406-2000, against 305,561 in 1855, being an increase of 31,448 tons. The number of tons transported one mile was 32,338,877; this gives \$2 56 per ton per mile earned in freight in 1856, against \$2 76 in 1855, and \$2 66 in 1854.

"The accounts for the expenses of the year have been kept, as far as practicable, with a view to determine the comparative cost of our freight and passenger business; such of the accounts as could not be divided in detail have been adjusted from the best data possible to obtain. The result shows as follows:

Freight earnings.....	\$827,311 87
do expenses.....	322,807 58
	\$444,504 29
Expenses 46 39-100 per cent of earnings.	
Passenger earnings.....	\$453,942 45
do expenses.....	217,170 78
	\$236,771 67
Expenses 47 86-100 per cent. of earnings.	

#### EQUIPMENT.

"The company own, of all classes, forty-two locomotives, viz:

- 13 passenger locomotives,
- 23 freight do
- 3 switching do
- 3 small locomotives, not of service for the present wants of the company.

"The number of miles run by locomotives during the year was as follows:

On passenger trains.....	253,025
On freight ".....	344,651
On gravel ".....	53,740
On wood ".....	28,940
On switching ".....	64,470
	744,856
Cost for repairs of all locomotives.....	\$69,699 28

"Our passenger equipment remains the same as last reported except a change in our second class cars:

27 first class passenger cars,	
3 second class " "	
4 baggage " "	
2 mail and express " "	
"The company owned, at the close of the year, the following freight cars:	
Eight wheel house cars.....	222
" " house stock cars.....	65
" " open ".....	60
" " platform cars.....	67
Total.....	414

"The company also own 72 eight wheel gravel cars, and as the graveling service was so far advanced to completion the past season, that number will not be required for the future."

#### ILLINOIS CENTRAL R. R.

The Annual Report of this company is out, and we have just been favored with a copy, from which we learn that during the year 1856 the last seventy-seven miles of the road have been completed, making, in all, 704 miles of road in operation. During the year \$109,764 45 have been expended on the fencing of the road.

The general account of the company stands as follows:

Permanent Expenditures.....	\$21,447,949 47
Interest Account.....	1,623,537 61
Interest Fund.....	28,526 60
Total.....	\$23,100,359 68

This amount has been raised as follows:

Capital.....	\$ 3,258,615 00
Construction Bonds.....	14,798,944 81
Freeland Bonds.....	2,079,876 61
Opt. Right Scrip.....	836,673 75
Net Floating Liabilities.....	2,136,229 51
Total.....	\$23,100,359 68

To the above actual outlay on the road should be added as follows:

Actual cost.....	\$23,100,359 68
Loss on issue of Construction Bonds.....	1,574,555 19
Loss on issue of Freeland Bonds.....	920,123 39

Loss on issue of Opt. Right Scrip.....	45,326 25
Amount carried to Interest Fund from Capital in 1851.....	300,000 00

Total cost of road.....\$25,940,344 51

This will show a cost of nearly \$37,000 per mile of road constructed. It also shows that the road was built on a capital little more than one-eighth of the cost of the work. The resources to meet its immense liabilities will be shown further.

The details of the debt of the company are:

#### CONSTRUCTION BONDS.

Redeemable in 1875, bearing 7 per cent. interest.....	\$12,825,000 00
Do. 6 per cent. interest.....	4,115,000 00
	\$17,000,000 00
Held by Company.....	626,500 00
	\$16,373,500 00
Loss on issue.....	1,574,555 19
Net balance.....	\$14,798,944 81

#### FREELAND BONDS.

Redeemable 1860, bearing interest 7 per cent.....	\$3,000,000 00
Loss on issue.....	920,123 39
Net balance.....	\$2,079,876 61

#### OPTIONAL RIGHT SCRIP.

Redeemable Jan. 15, 1858, the proceeds of optional rights to subscribe to un-issued capital stock, being pledged for its redemption.....	\$900,000 00
Less amount canceled to correspond to rights surrendered.....	28,000 00
Total issue to date.....	\$872,000 00
Loss on issue.....	45,326 25
Net balance.....	\$826,673 75

#### CAPITAL STOCK.

Of the capital stock of 170,000 shares, 29,653 are un-issued, being covered by optional rights to subscribe on or before Jan. 1, 1858, and 140,357 shares have been issued. There has been paid, up to date, as follows:

\$30 per share on 12,266 shares.....	\$ 367,980 00
25 " 127,459 ".....	3,187,225 00
20 " 70 ".....	600 00
5 " 562 ".....	2,810 00
Total.....	\$3,558,615 00
Less amount carried to interest fund in '51.	300,000 00
Net balance.....	\$3,258,615 00

#### RESOURCES OF THE COMPANY.

The resources of the company to meet its liabilities, as they mature, are found in its immense land grants, the proceeds of which have been as follows:

Sold previous to Jan. 1, 1856, 522,863.10 acres, at an average of \$9 78 per acre.....	\$5,177,171 41
Sold during 1856, 326,347.90 acres, at an average of \$13 52 per acre.....	4,548,561 92
On hand Jan. 1, 1857, acres.....	1,729,788.99

The yield of these lands, at the average of \$13 52 per acre, as obtained during 1856, would be \$23,386,746. The proceeds of the land sales, as the notes received in payment mature and are paid, are invested in the bonds of the company, which are thus paid and canceled—\$127,000 having been thus employed already.

We shall close this brief notice of this company with the statement of its earnings and expenses for 1856:

Earnings for passengers.....	\$1,112,401 79
" freights.....	1,156,471 23
" miscellaneous.....	207,162 26
Total.....	\$2,476,035 27
Operating expenses.....	1,444,546 19
Net earnings.....	\$1,031,489 08
Deduct charter, taxes, &c.....	93,052 69



Balance carried to interest fund for operation of road.....\$938,436 09  
Sales of interest fund lands.....304,861 08  
Profit and loss account.....28,033 59  
Balance Jan. 1, 1856.....2,177 94

Balance at credit.....\$1,273,529 40  
Interest for 1856 on funded debt.....1,302,382 00

Net balance at debit.....\$28,852 00

The above statement will show that the road has earned during the past year about \$3,500 per mile for the whole 704 miles, and a larger sum if we estimate only the miles actually running during the whole year.

The earnings of the past year, as compared with the preceding one, have been :

1856.....\$2,476,035 27  
1855.....1,532,118 81

Increase (60 per cent.).....\$943,916 46

The per centage of expenses to earnings has been 58 per cent. on the gross. This includes heavy expenses for repair of track consequent upon the newness of the road.

#### LEXINGTON & DANVILLE R. R.

This road forms the Second Division of the Kentucky Central Railroad, and was chartered March 5, 1850, with a capital stock of \$700,000, not to be increased beyond \$1,000,000. Its length is 35 miles, and it passes through Fayette, Jessamine, Mercer and Boyle counties. Its gauge is fixed at 5 feet.

AMENDMENTS TO CHARTER.—1st. Giving power to certain counties to subscribe for stock, issue bonds, and tax citizens to the extent of 3 per cent. on amount of their taxable property, &c.

2d. Authorizing an extension beyond Danville to the Tennessee line; and counties through which it passes to subscribe stock to the amount of 3 per cent. of their taxable property.

3d. Similar power on branch through Harrodsburg to the Tennessee line, toward Memphis.

#### STOCK SUBSCRIBED.

Fayette county, by popular vote.....\$200,000 00  
" " by individuals.....51,150 00  
Jessamine county, by popular vote.....75,000 00  
Boyle county, by popular vote.....150,000 00  
" " by individuals.....90,100 00  
Mercer county, by individuals, including a small amount in Jessamine.....23,250 00  
Covington & Lexington R. R. Co.....62,000 00  
Citizens of Cincinnati.....68,000 00

Total amount.....\$719,500 00  
Total amount paid in.....694,444 69

Amount yet due.....\$25,055 31

Mercer county is authorized to subscribe \$250,000, and will doubtless do so, to be expended on the branch to Harrodsburg, after crossing the Kentucky river.

AMOUNT OF WORK DONE.—The graduation, masonry and trestle-work from the Covington depot in Lexington, through that city and the counties of Fayette and Jessamine, to the Kentucky river (23 miles), except a portion of the last two miles, now being finished. Right of way paid for, and fences generally made; depot and water station at Lexington partly constructed; six miles of rails laid down; the towers and anchorage of the

great suspension bridge across the Kentucky river (costing \$97,667 23) finished; grading beyond the river done to the amount of \$31,026 46. ALL PAID FOR.

ROLLING STOCK.—One locomotive, six platform cars, two hand cars, and some thirty dirt cars, for purposes of construction, &c. The Covington & Lexington Company have contracted to furnish rolling stock to operate the road, they paying all expenses, our company keeping the road in repair, and dividing gross receipts.

MATERIALS ON HAND.—Timber for two depots; chairs, spikes and cross-ties sufficient to lay down the rails to the river (23 miles); 800 tons of iron, now being laid down, besides 600 tons on the way from New Orleans.

FIRST MORTGAGE BONDS.—James Punnett, Esq., Cashier of the Bank of America, and Isaac Seymour, Esq., Cashier of the Bank of North America, Trustees; whole amount \$300,000, on first 23 miles of road from Lexington to Kentucky river; 25 bonds sold to Jessamine county; 45 to other parties—\$70,000; \$230,000 now proposed to be sold, the proceeds of which will complete that portion of the road, and leave it entirely free from all other debts, besides paying for five warehouses, depots, water-tanks, &c.

CONNECTING ROADS.—Look at the small map annexed and then at the first good map of the United States you can find.

1st. All the railroads concentrating at Cincinnati, O., from the east, north and west; say, at least, 4,000 miles now finished, and 2,000 miles under construction, or provided for, in the Northwestern States and Territories, via. the Covington & Lexington Railroad (being the First Division of Kentucky Central Trunk Line).

2d. All the roads touching the Ohio river opposite Louisville, Ky., via. the Louisville, Frankfort & Lexington Railroad.

3d. The roads connected with Portsmouth, Ohio, via. Maysville & Lexington Railroad—unfinished.

4th. The Lexington & Big Sandy Railroad—unfinished.

5th. From the South—The North Carolina, South Carolina, Georgia, Florida and Alabama Railroads, concentrating at or near Knoxville, East Tennessee, via. the Knoxville & Kentucky Railroad to Danville; and the Mississippi, Louisiana, Texas and Arkansas Railroads, via. Nashville and Memphis to Danville, or Harrodsburg—all finished, or under construction and provided for, viz :

Finished roads in actual operation.....4,676 miles.  
In progress.....1,875 "

Total.....6,551 miles.  
Literally the Atlantic Ocean of railroads at the North, and the Pacific Ocean of similar improvements resting on the South Atlantic, Gulf of Mexico and Lower Mississippi, brought in close neighborhood, and united by our *Isthmus line* through Kentucky—a country well

known to be unrivaled for its fertility and healthfulness.

From the Ohio river to the Cumberland Mountains, on the *western frontier* of Virginia, there is not, nor can there ever be, a parallel *rival* road. East of our line, the country is hilly and mountainous, and west of it not so rich or level. If we had only open prairies, or level woodlands to pass over, as in Ohio and the Western States generally, instead of an undulating surface, with frequent hard limestone ridges to cut through, the stock subscriptions of \$20,557 per mile would have completed the work in first rate style, without the aid of any borrowed capital.

The road will have considerable employment as soon as it is completed to Nicholasville (13 miles), as all the freight and passengers from Jessamine and other counties *south of it* will change their mode of conveyance at that place.

When the next section is finished to the Kentucky river (10 miles) the large quantities of coal, salt, lumber, &c., annually descending that stream, and which is consumed in Lexington and other neighboring towns, as well as in the country, will alone be sufficient to pay the whole interest on the bonds issued. These articles are now hauled in common road wagons, at thrice the price of railroad transportation.

#### KENTUCKY CENTRAL R. R.

1st Division, from Covington, opposite Cincinnati, to Lexington.....38 miles.  
Gross receipts for 1855.....\$364,973  
" " 1856.....400,000

Increase.....\$135,027

Every section of the Lexington & Danville Railroad, as completed, will add largely to these receipts.

#### TABLES OF DISTANCES.

No. 1—Cincinnati to New York, via. N. Y. Central R. R.....1,883 miles.  
Cincinnati to Pittsburg.....225 "  
" " Chicago.....275 "  
" " St. Louis.....340 "

No. 2—Cincinnati to Charleston, S. C., via. Knoxville & Blue Ridge R. R., per Kentucky Central R. R. (in progress).....740 "  
Cincinnati to Charleston, via. Atlanta (finished).....790 "  
Cincinnati to Montgomery, Ala., via. Atlanta.....755 "  
" Savannah, Ga., via. Atlanta.....775 "  
" N. Orleans, via. Ky. Cent. R. R. 800 "  
" Memphis, Tenn., do do 390 "

#### KENTUCKY STATISTICS.

Population by Census, 1850.....982,405  
" " in 1857.....1,122,500  
Taxable property in 1850.....\$299,381,809  
" " 1855.....407,326,443  
Estimated increase to 1857.....81,465,288

Aggregate, 1857.....\$488,891,731

Taxable property in Fayette, Jessamine, Mercer and Boyle counties in 1855, through which the road passes from Lexington to Danville, viz :

Fayette.....\$20,242,039  
Jessamine.....6,038,430  
Mercer.....5,365,013  
Boyle.....5,384,476

Total.....\$37,030,358  
Estimated increase to 1857.....7,406,071

Aggregate, 1857.....\$44,436,429  
Number of counties in the State.....106

The taxable property of the above-named



four counties is one-eleventh part of the whole taxable property of the State.

The taxable property of the block of counties lying south of the Kentucky river—the imports and exports of which will necessarily pass over our road—will be found still greater than those immediately on the line of the work.

Kentucky State debt (redeemable).....\$3,373,972  
Present value of 6 per cent. State bonds, 103½ per cent.  
Purchased last year with surplus money in the Treasury.....\$413,000  
There will be enough surplus at the end of the present year to purchase.....\$500,000  
Unless the Legislature shall devote it (*more wisely*) in aid of our railroad and river improvements.  
Aggregate capital of chartered banks authorized to issue bills.....\$10,804,822  
Present average value of their stock.....114½ per cent.  
LESLIE COMBS,  
President Lexington & Danville R. R.

April 1, 1857.

[We understand that the iron has been received at Covington to lay the first portion of the road to Nicholasville. We trust the road will be carried through to its final termination by its friends, without fail, and that at once. It is one of great importance in natural position, as a connecting link, and from the local resources of the country it traverses. The annual meeting of the stockholders is to take place at Lexington on the first Tuesday in May. All interested should be there.—  
ED. R. R. RECORD.]

## Earnings.

MILWAUKEE & MISSISSIPPI R. R.—EARNINGS FOR MARCH.—The earnings for the month of March just passed compare as follows with those of the same month last year:

	1857.	1856.
Freight.....	\$20,019 64	\$14,095 23
Passengers.....	19,637 28	15,250 13
Total.....	\$40,156 92	\$30,568 96

Increase this year, \$9,592 96.

The receipts for the first three months of this year compare with the like period of last year as follows:

1857.....	\$102,049 13
1856.....	95,684 62

Increase this year.....\$6,404 51

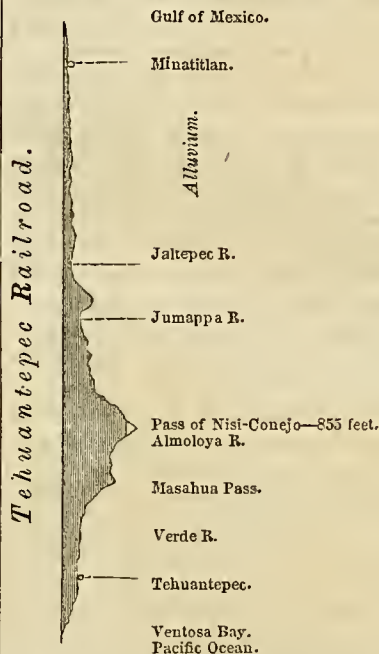
Considering the fact that the running of the trains on this road, in common with many others of the west, was hindered by ice on the track for a great part of the winter, the showing is a good one. The business increases rapidly as spring opens, and with the completion of the track to Prairie du Chien, and the running of the regular passenger and freight trains to the Mississippi river, which will commence next week, the receipts will soon be very large.—*Milwaukee Sentinel*.

## WAYS TO THE SOUTH SEA.

### THE TEHUANTEPEC RAILROAD.

The Garay grant: who has not heard of it? How SENOR JOSE DE GARAY obtained from SANTA ANA, as long ago as 1842, the right to create a communication, wet or dry, across this Isthmus, with liberal concessions of land, powers and privileges? How GARAY delayed, and the American war intervened, stripping Mexico of vast territories at the North? How the discoveries of gold in California and Australia suggested that the best possession still left her was the transit of this Isthmus, and how they repudiated the Garay grant, which had passed in the meantime, through several assignments, into the hands of a New

Orleans company, and resumed her rights in all their extent? How under the more enterprising regime of Gen. COMONFORT, the actual President, the work of constructing a railroad has been commenced with Mexican energy, which may complete it in the lapse of an age or two? The natural features of the country are more favorable to the creation of a railroad than of a canal. SENOR MORO, who surveyed it many years since with an eye to the latter, found the scheme practicable, though demanding a long series of locks, the summit elevation of 684 feet above ocean level having to be overcome. Enough water to supply these successive locks was found on the table-lands; but the formidable cost of their construction has probably discouraged the enterprise, for the present, at least.



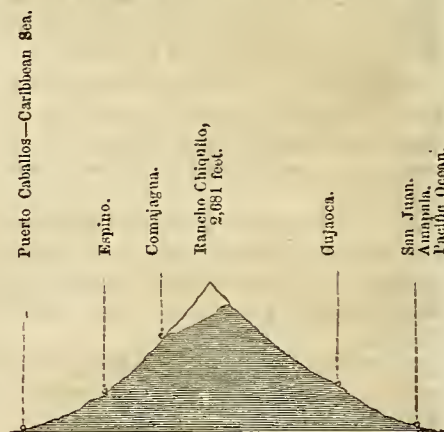
The New Orleans Company, organized under the worthless grant of SENOR GARAY, had the ground carefully surveyed in 1851, with a view to a railroad, found a choice of available routes, and a possibility of still better ones being discovered. Their search for the latter, was, however, cut short by the interference of the Mexican Government. The one fixed upon by Major Barnard, the Chief Engineer, has been adopted, we believe, by the present managers of the work. The path over the Cordilleras is indicated by the above profile—a profile unscientific reader—being such a side view of the ground traversed by an improvement, as if the earth on one side were all cleared away down to the sea level, and you were looking at the remaining wall of rock and ground.

The greatest height to be overcome by this track is 855 feet above the Pacific waters. The direction is southwest from a point not far below Vera Cruz; the distance from the Gulf of Mexico to the Bay of Ventosa, on the Pacific, is 186 miles. The advocates of the Tehuantepec transit claim for it the advantages of traversing a more healthful region than others further south; of shortening the distance to San Francisco from New York by remote from the possessions of European Powers, which command the other thoroughfares. It is, on the other hand, objected that the winds and currents of the Pacific terminus

are unfriendly to the access of sailing craft; an objection, however, equally applicable to all the ports contiguous to the Isthmus. The local traffic of the river Coatzacoalcas is certainly of great value, nearly eight thousand tons mahogany having been exported thence last year, chiefly to the United States. Recent intelligence from Guatemala proves that the confidence of President CARRERA in the railroad enterprise is so perfect, that he has already chartered a line of steamships to connect Isthapa with Tehuantepec. In the meantime, a carriage road has been so far completed across the Isthmus, as to warrant Colonel A. G. SLOO, the head of this special undertaking, in contracting with the Government of the United States for the transmission of a semi-monthly mail between New Orleans and San Francisco. Colonel Sloo proposes to commence in the course of the summer.

### HONDURAS RAILROAD.

Mr. E. G. SQUIER, of Nicaragua notoriety, has been running about the world these three years with a Honduras Railroad in his breeches pocket. Disgusted with the Nicaragua project, he prospected Honduras for a better; discovered a gorge in the mountains admitting of a bold escalade, and through it laid down his route. The survey, effected in 1853, yielded a profile extremely presumptuous in its characteristics. Here it is.



### HONDURAS RAILROAD.

The height attained, 2,681 feet, is formidable, but not impracticable. The road is designed to commence at Puerto Caballos, close down in that angle of the Caribbean Sea which is formed by the Belize and the north shore of Honduras, and runs directly south to Amapala, 160 miles away upon the Bay of Fonseca, Pacific side. The most obvious remark suggested by inspection of the map is, that its approaches on the east are controlled by the British settlements at the Belize, a circumstance disadvantageous to any American interest in the road, while it forms a powerful recommendation to an English Company. We accordingly hear that London capitalists have adopted it, designing to push the work with the utmost diligence.

The recent treaty between Her Majesty's Government and Honduras, in relation to the Bay Islands, and the Belize, had the pacification of that vicinage in sight, as an inducement to the undertaking. Mr. SQUIER has been met by the opinions of careful engineers, who pronounce his scheme impracticable. Others have sustained him; and as such men as the Governor of the Bank of England head the new Company, we are to assume that the

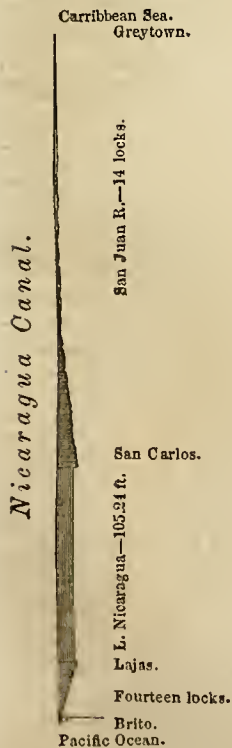


balance of authority is in his favor. The Government of Honduras is especially gracious to the enterprise, because it connects Comayagua, the capital with both oceans.

#### NICARAGUA CANAL.

A ship canal through Lake Nicaragua was a pet project a century ago. Governments and private companies have time out of mind procured surveys to be made demonstrating the possibility of the work; without, however, bringing it within the limits of reasonable cost. The estimates have, in fact, in every instance, frightened the speculator away. Six or seven years since, the prospect became so luminous that the British and American Governments deemed it prudent to provide at once for the neutralization of the route, whence sprang the Clayton-Bulwer treaty, of dubious memory.

Both the project and the treaty, have, however, come to nothing; and who shall propose the revival of either, while the struggle between Walker and the natives continues? The ultimate practicability of the enterprise is probably ascertained, notwithstanding the criticisms of Mr. Squier. The San Juan River to the lake may be supplied with locks, and other slack-water arrangements, so that 120 miles of the distance may be overcome; the lake, which is 105 feet above the Pacific, may be traversed by vessels of deep draught to Lajas, 56 miles; whence a cut embodying a series of locks fed from the lake, may conduct to the Pacific, at Brito. Or, extending through Lake Managua, the route may debouch at Realejo, a more elaborate and extensive work, without attractions to capitalists. Of the line by the way of Brito accept the annex portrait:



The realization of this outline is, we repeat, a question of time.

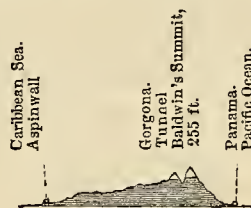
#### CHIRIQUI TURNPIKE.

Chiriqui lagoon lies in the northern edge of the State of the same name, which is the northern-most province of New Granada, and adjoins Costa Rica. The lagoon is midway

on the map between Greytown and Aspinwall. Two American companies have directed their attention to this locality—the Chiriqui Improvement and the Chiriqui Real Estate Companies,—the former with a view to constructing a broad carriage-way for the transit of passengers from the lagoon to David, a port nearly ninety mile distant upon the Pacific. The height of the Cordilleras discourages the idea of a Railroad, while the same difficulty, and the absence of water forbid a canal. The great productiveness and abundance of local traffic of the country must repay generously the less costly the work.

#### PANAMA RAILROAD.

While the rest of the world has talked itself weary of Isthmus transits, New York has made one. The Panama road owes its existence to the celebrated traveler JOHN L. STEPHENS, who first conceived the plan, and inaugurated the necessary surveys. It departs from the Island of Manzanilla, in the Caribbean Sea, whereon stands the city of Aspinwall, ascends the Sierra steadily until within a few miles of the Gulf of Panama, attaining a summit level of 255 feet; when, by a grade of 60 feet to the mile, it descends to the Pacific waters at Panama. The entire length is 47.6 miles.



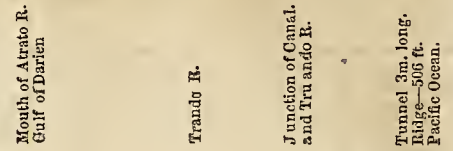
#### PANAMA RAILROAD.

In order to accommodate the urgent demands of California travel, it was built in the first instance with no regard to stability. The work of straightening abrupt curves, reducing grades, and replacing wooden bridges and water-ways with stone masonry, now engages the Company. Eventually the road will be one of the most useful in the world. As is the case with the Honduras road, there is little prospect of a water channel in the neighborhood, owing to the absence of sources at a sufficient elevation to supply the locks.

#### ATRATO CANAL.

The Emperor of the French, we are told, has recently become deeply interested in a canal leading from the Atrato River to the Pacific Ocean. This is the track pointed out by VON HUMBOLDT, as the only one he believed practicable. The Atrato River is a broad and deep tributary to the Caribbean Sea, discharging into the Gulf of Darien. The examination effected at the cost of Wall street enterprise, shows that the Atrato and the Truando, one of its estuaries, may be made navigable for the largest vessels, one hundred miles, to a point twenty-five miles from the South Sea. The latter twenty-five miles require some heavy excavations, and a double tunnel three miles long, and high enough for the "mast of a tall admiral" to pass through. The expense of such a work is prodigious; the estimates call for some \$150,000,000, but as the canal is to be without locks, running therefore upon the level of river and sea, its advantages may perhaps balance the initial extravagance of cost. The height of the Sierra, through which the tunnel is designed,

appears in the profile to exceed slightly 500 feet.



#### ATRATO CANAL.

The Chiriqui Turnpike, the Panama Railroad, and the Atrato Canal, are within the bounds of New Granada; and must therefore class as South American enterprises. Between the last two is a long stretch of Isthmus, traversed by the inexhaustible Cordilleras, through which exploration has thus far sought an available passage vainly. Poor STRAIN, after squandering the lives of his companions, and barely saving his own, found no practicable depression. The half dozen routes we have indicated are therefore the only ones known, or likely to be. We may make up our minds to be contented with the choice they offer us.

As to cost, it is hard to say how large it ought to be to prohibit the hope of a profitable return. Considering the immense value of the East India trade, European and American; considering the near prospect of enlarged intercourse with Japan and China; considering the growing Empires of Australia and California; the wealth of the South Sea Islands; the opulence of the South American coast; the extent of the Pacific whale-fisheries; and finally, considering that all these are only accessible at present by tedious, expensive, perilous voyages from six to ten thousand miles longer than the paths through the Isthmus; can we doubt the value of these latter channels of intercourse? To avoid the Southern Capes of frost, and cloud, and storm, what transshipments at the Tehuantepec, or Panama, by the railroad, would not be economical and wise? What canal tolls would be large enough to drive the merchantman around the Horn, rather than floating through the calm waters of an aqueduct, the "journey of Sabbath day." There is certainly very little doubt that Central America will presently be the world's highway.

The Boston Transcript of Tuesday says: "The Boston Submarine Company have been for some time past vigorously engaged in pushing forward their preparations for raising the sunken ships at Sebastopol, under an arrangement made at St. Petersburg, by Col. G. W. Lane, and on Saturday last, the day fixed for sailing, at a quarter past 5 P. M., one of the vessels of the expedition, the *Silver Key*, cast loose from the wharf, and took her departure for the Black Sea. She was freighted entirely with machinery and apparatus adapted to raising ships, and to other submarine operations, and is commanded by Capt. Jos. C. Currier, well known as one of our most reliable shipmasters. The screw-steamer *General Knox*, another vessel of the expedition, is already in the Black Sea."

The Monmouth (N. J.) Inquirer says wheat has been greatly injured throughout the eastern section of that county, and is looking considerably worse than even last year at this time.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds.	Name of Company.	Quot' of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	173	Al x'ndria, Lon & Hmp'sr	173	5,000,000.00					
498,800	6			1862-3	2d	54.55	Androscog'n & Kennebec	54.55	1,400,000.00			209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.		Atlanta and LaGrange..	26.5	1,000,000.00	199,000.00		278,123.74	173,780.74	4 pr. ct. 6m
52,646				now	"		B'ng'r, Old T. & Milford..	12.5	135,000.00	52,646.26		39,104.40	8,671.61	15,000 in '53
500,000	6		N. Y.	1860	"		Boston & Worcester..	44 5-8	4,500,000.00	500,000.00		1,108,781.90	437,062.03	180,000 4.6m
300,000	7			1857-9-62	1st mortgage.		Buffalo & State Line..		1,300,000.00					5 pr. ct. 6m.
200,000	7			1864	Domestic.		" " "							
577,187	6			1872	4th mortgage.	30.	Central Ohio..							
192,200	7			1874	1st mortgage.		Champl'n & St. Lawrence	43	1,872,800.00	1,001,087.00		168,200.00	77,700.00	10 per ct.
380,000	7				2d		" " "							
1,440,000				1864-7	Domestic.		Ch'r'l'te & South Carolina.	110	1,750,000.00	380,000.00		291,212.86	47 per ct.	\$72,360
1,200,000	6-7-8		N. Y.	1868-9	1st mortgage.	138	Ch'go, Burl'ng'n & Quincy.		3,746,900.10	3,114,000.00		1,095,185.00	571,725.23	15 pr. ct. 6m
374,000	8			1868-76	2d		" " "							
					Convertible.		" " "							
1,300,000					1st mortgage.		Chicago, Fulton & Iowa..	132	1,761,149.16	2,241,500.00		221,491.96		
532,000					2d		Cin. Wil'ng'n & Zanes'ville							
164,000					3d		" " "							
305,500					"		" " "							
540,000	6				Income.		" " "							
43,000				1873	Convertible.	104	Cleveland Col. & Cin.	139	4,741,220.0			1,329,754	700,204	6 per cent.
400,000	7			1864	1st mortgage.	85	Cleveland & Mahoning..		1,500,000.00					
					2d		" " "							
000,000	6			1873			Cumberland Valley..	52	1,218,394.00			160,511.56	81,101.56	\$33,250.24
500,000	7			1857-8-9	1st mortgage.	52	Dayton & Cin. short line.		1,000,000.00	1,000,000.00				
350,000					"	93 6-10	Eastern Railroad..		3,345,900.00			665,578.79	988,070.84	\$234,133
740,000	7			1869	1st mortgage.	130	East Ten. & Virginia..		625,450.00			30,897.20	19,692.30	
88,000	10			1861	1st	20	Essex Railroad..		700,000.00					
400,000	10			1864	2d	109	Evansville & Crawf'd'vle		2,228,657.0			243,970.42	136,061.90	\$133,221.45
200,000					1st mortgage.		The Fitchburg (Mass.) R.R.		3,540,000.00			681,162.52	213,837.81	3 per cent.
					"	33	Fox River Valley..		800,000.00					
100,000	6				1st mortgage.	15	Fair Haven Branch..		300,000.00			50,381.23	14,822.45	\$166,240.00
100,000	6				1st	233	Georgia RR & Banking Co		4,156,000.00			1,068,202.56	357,689.42	\$166,240.00
300,000					"	20	G't Falls & Conway R.R.					27,376.69	14,207.07	
4,000,000	6 1-9			1858	1st	281 1/4	G't West'n R.R. of Can..		4,191,550.60			2,068,836.00		8 pr. ct.
2,000,000				1869-70	1st	74	Housatonic Railroad..		2,000,000.00			339,196.50	176,529.98	
1,812,000				1860	2d	144	Hudson River..	24 1/2	4,000,000.00			1,924,382.44	718,037.40	
12,885,000	7			1875	3d mortgage.	144	" " "		4,000,000.00					
4,715,000	6 1/2			1875	1st	130	Illinois Central R. R.	704	18,453,376.00			1,476,035.27	10,149,080	7 pr. ct.
3,000,000	7				"	61 1/2	" " "	704	3,538,376.00					
600,000	7			1860	Freeland.	99 1/2	" " "							
700,000	7	Nov. 1.			1st mortgage.	80 1/2	Indiana Central..	72 1/4				354,871.00		3 pr. ct.
50,000	7	Jan. & July 1		1862	2d		" " "							
700,000	7				1st		" " "							
					1st mortgage.		Iron R. R. ....	13	123,700.00					
					"		Kentucky Cen. 2d Div.		719,500.00					
218,000	7				1st	32	Knoxville & Kentucky..		166,000.00			23,233.59	14,233.59	
1,000,000	7			1866	2d	184	Laurens (S. C.) R. R.					50,274.71	14,149.13	\$8,000
1,000,000	7			1875	2d	12 3/4	Louisville & Nashville..		300,000.00			587,236.57		10 pr. ct
2,000,000	6				"		Lowell & Lawrence		2,697,090.00				162,277.50	
2,500,000	7				1st		Mad River & Lake Erie..		2,697,090.00					
2,000,000	7			1868	1st	26	Manchester & Lawrence.		1,000,000.00					\$24,000
60,000	7 and 8			1874	2d	50.	Marietta & Cincinnati..							
420,000	8			1867	1st		" " "							
320,000	8				1st mortgage.	27	Mexican Gulf R. R.							
320,000	8			1881	1st	30	Milwaukee & Horicon..							
6,000,000	6			1884	2d	32	Mineral Point R. R.							
				1884	1st	32	" " "							
500,000	7				"	497	Mobile & Ohio..		10,000,000.00			253,498.96	162,802.24	7 pr. ct.
2,356,000	7			1869	1st mortgage.	15	Nashua & Lowell R. R.		600,000.00			194,752.42	55,501.74	7 pr. ct.
8,892,600	6	May & Nov.	N. York		"	55	New Haven & North'm'n		922,500.00					2 pr. ct. 6m
3,000,000	7	June & Dec.	N. York	1864	Con. till 1859.	88 1/2	New York Central..	87 1/2	23,067,400	14,763,897		7,707,348	3,609,481	3 pr. ct. 6m
926,000	7			1873	1st mortgage.		" " "					1,040,593.26		
416,700	6			1864	2d	133	N. Y. & Harlem R. R.		5,717,100.00				64,678.71	\$37,692.30
500,000	7			1863	1st		" " "							
300,000	6				1st	50	N. Y. Prov. & Boston..		1,58,000.00			245,713.00	51,544.40	
					2d	66	N. Lon. William'ntu & Pal.		1,700,000.00			120,571.50		\$25,000
					"		" " "							
1,500,000	6				"	5	Pontchartrain R. R.		500,000.00					
1,000,000	6			1873	1st mortgage.		N. O. Opel's & Gr't West.		6,000,000.00			116,795.00	366,118.80	7 pr. ct.
2,000,000	6			1873	2d	62 1/2	N. Y. & New Haven..		3,000,000.00			1,007,666.48		
1,500,000	7			1885	3d	103 1/2	" " "							
3,000,000	7			1859	1st mortgage.		North Western Va. R. R.							7 pr. ct.
419,300	5				"	118	" " "		2,000,000.00			600,000.00		
221,800	6			1877	1st mortgage.	19 1/2	Northern (N. Y.) R. R.					23,176.74	88,458.56	2 1/2 pr. ct.
				1860	"	60	North Missouri R. R.					304,236.33		
					"		Norwich & Worcester R.R.		2,111,500.00					
					"		" " "							
400,000	6				"	94	Ogd'sb's, Clay't'n & Rome					289,690.10	137,875.93	5 pr. ct.
1,200,000	8			1866	1st mortgage.	88 3/4	Ontario, Simcoe & Huron		2,957,500.00			276,539.02		
300,000	7			1875	2d mortgage.		Orange & Alexandria R.R.							
300,000	8			1868	1st mortgage.	47	" " "		1,500,000.00					6 pr. ct.
300,000				1873	1st		Peoria & Bureau Val. R. R.							
350,000	6				"		" " "							
800,000	7			1861	1st mortgage.	28 1/5	Philadelphia & Trenton.		1,000,000.00					
1,260,000	6			1864 to 1874	1st	47	Potomac & Concord..							
				20 years.	"	76	Potsdam & Watertown..		2,000,000.00					
					1st mortgage.	62 1/2	Rutland & Washington..		950,000.00			68,525.42		
					"	86	St. Louis & Iron Moun. R.R.		6,000,000.00					
					"	168 3/4	Salem & St. Louis R. R.		400,000.00					
500,000	6				1st	116	Sud'sky, Maus'f'de New'k						19,050.64	
250,000	6				2d	26	Sullivan Railroad..		500,000.00			75,246.06	17,378.08	
					"		" " "							
317,000					1st mortgage.	145	Tennessee & Alabama..					39,586.44		11m. R pr. ct
300,000	6			1861	1st mortgage.	73	Terre Haute & Richmond		1,294,450.00					
198,000				1840	2d	212	Toledo, Wabash & Western							
262,000				1875	3d		Troy & Boston..		1,000,000.00					
					"		" " "							
2,500,000					1st, 2d, 3d	46	Vicksburg & Jackson...						165,076.04	
					"	215	Virginia & Tennessee..		3,000,000.00			322,048.60		2 pr. ct.
596,000	7				1st mortgage.	31	Westchester (Pa.) R. R.		165,000.00					
200,000	7				2d	171	Wilmington & Manchester							
					"		" " "							
					"	32	Winchester & Potomac..							
					"	45 69.	Worcester & Nashua....							



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

April 3, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858, ..	"	"
Cin. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	65	68
Erie, 3d Mortgage, 1863, ..	84½	85½
" Sinking Fund, ..	83	85
" conv. 1862, ..	73	78
Grand Trunk (Canada) Debenture, ..	88	90
Great Western " conv., ..	123	128
" " non-conv., ..	107	109
Illinois Central, 1st Mort., 7½s., ..	90	91
" " with option 70 per cent. shares till Jan. 1858, ..	108	110
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	86	88
Little Miami 1st Mort. not conv. 6's, ..	"	"
Marietta and Cincinnati, 1st Mort., ..	"	"
Michigan Central, conv., 8's, 1860, ..	90	92
do do do 1869, ..	91	93
N.York Central. No Mort. Not conv., 6's 8½s., ..	81½	82
" " conv., 7's, ..	93½	94½
Ohio and Mississippi, 1st Mort., ..	"	"
Ohio and Pennsylvania, Income 1872, ..	68	70
Panama. No mort. conv. 1866, ..	"	"
Pennsylvania, 1st Mort., conv., ..	88	90
" " Sterling, 2d Mort., ..	91	93
Steuenville and Ind., 2d Mort., ..	"	"

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE

AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending April 22, 1857.

## BONDS.

\$5,000 Indianapolis & Cincinnati R. R. 7 per cent. 2d Mortgage Bonds, ..	80	and Int.
2,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	82	
1,000 Cincinnati, Ham & Dayton R. R. Co. 7 per cent. 1st Mort. Bonds, ..	88	"
4,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds, ..	67½	
3,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. bonds, ..	60	
1,000 Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds due 66, ..	87	
2,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds, ..	50	"
1,500 Cincinnati & Chicago R. R. Co. 10 per cent. Real Estate Bond, Butler & Meredith, Trustees, ..	20	"
3,000 Dayton & Western R. R. 7 per cent. 3d mort. Bonds, ..	55	
1,060 Bourbon county, Ky., 6 per cent. Bonds, ..	80	
800 Ohio Central R. R. Co. 7 per cent. 4th Mortgage Bonds, ..	30	
1,500 Cincinnati & Whitewater Canal Bonds, ..	10	

## STOCKS.

225 Shares Ohio & Miss., ..	11¼
200 " do do, ..	11¼
300 " do do, ..	11¼
237 " do do, ..	12
175 " do do, ..	12¼
84 " Indianapolis and Cin., ..	64½
100 " do do, ..	64½
27 " Indiana Central, ..	48
80 " Hillsboro' & Cin., ..	19
45 " Columbus & Xenia, ..	93
160 " Little Miami, ..	94
62 " Dayton & Western, ..	20
20 " Cin., Ham & Day. ex-div., ..	68½
15 " do do do do, ..	69
150 " Southern Pacific, ..	\$3.25 for \$5 paid.
200 " do do do do, ..	3.00 for 5 "
100 " do do do do, ..	1.75 for 3 "
5 " Farmers' Bank Ky., ..	120

## MONETARY AND COMMERCIAL.

The great feature of the present season is the continued high price of Eastern exchange. With seemingly small payments to make to the East we yet find exchange on New York firm at 1 per cent. premium. This was the most noticeable feature of the season three years ago, and while it lasts there can be no case in the money market. Eastern banks cannot put out a circulation, because it is rushed home again with a demand for the gold. Western banks are still worse fixed, because more accessible to the note sorters. Hence we do not look for much ease till we see a material reduction in Eastern exchange.

Stocks are fluctuating. The demand for speculation is not as active, while the necessities of holders are often such as to force the market and reduce the quotations.

We notice sales of Southern Pacific at low rates. This is owing to the fact that the friends of the road here being entirely unrepresented in the directory of the company, look on the sales with indifference. All this would have been otherwise had a portion of the directory been taken from this city.

The New York Times gives an expose of the fluctuations of the Stock Board, and shows that of the very stocks that fluctuate the most, but a very small per centage is held in Wall street, among the operators. In some instances one, and in others two, three and five per cent.; and yet this small per centage gives what is called the market value to the whole.

The Bank of America and the Bank of New York, have each enlarged their capital to three million dollars.

Hewson & Holmes, in their circular, say:

The stringency which characterized our money market at the close of our last weekly circular has somewhat abated, which has imparted more activity to stock transactions with an improvement in several leading securities. Little Miami shares at 1 per cent. better than sales of last week, closing at 94. In Hamilton & Dayton shares we report sales at 69 ex-dividend—an improvement of ½. This company has made a cash dividend of 3½ per cent. out of the net earnings for the past six months, payable here on 25th inst., and on stock registered in New York 15th May. We have not been favored with the semi-annual report of the business of the company, but we learn that it is every way satisfactory to its friends, and that, no unusual event occurring, regular semi-annual cash dividends in the future may be expected. Columbus & Xenia shares have sold at 93. Indianapolis & Cincinnati shares have slightly declined, without, however, any apparent cause; closing sales at 64½. The business of the company for the month of March shows an increase over the corresponding month of last year of sufficient magnitude to have, in the ordinary workings of the money market, advanced the shares of the company. The earnings of the road for the month of March exceeded those of last year by over \$7,000. Ohio & Mississippi shares have advanced ¾ to 1 per cent. This road will open through its entire length for business, with a large equipment, about the 1st of May; the stock has consequently an upward tendency.

In Bonds the movement has been very steady at our last quotations.

## NEW YORK STOCK SALES, April 18, 1857.

\$2,000 Virginia 6's, ..	92
62,000 Missouri State 6's, ..	84
8,500 California State 7's, 1870, ..	50½
7,000 California 7's, 1875, ..	56½
1,000 N. Y. Central 6's, ..	88½
4,000 Hudson Riv. R. R. 3d Mortgage Bonds, ..	64½
10,000 Ill. Cent. R. R. Bonds, ..	99½
68 Illinois Central Rights, ..	132
475 Shares N. Y. Central R. R., ..	87
300 " Illinois Central R. R., ..	130½
20 " Erie R. R. stock, ..	47½
3200 " Reading, ..	80
15 " Panama, ..	92½
100 " Mich. Cent., ..	95
617 " Mich. So. & No. Ind., ..	67½
160 " Cleveland & Pittsburgh, ..	51½
6 " Cleve. & Cin., ..	104
5 " Galena & Chicago, ..	103
200 " Cleveland & Toledo, ..	71½
100 " Chicago & Rock Island R. R., ..	96½
100 " Del., Lac. & W. R. R., ..	52
10 " Milwaukee & La Crosse, ..	78
55 " Pacific Mail St. Co., ..	73½
120 " Hudson River, ..	25

Money matters are, as previously indicated, slightly easier, but the market is still sufficiently stringent to make negotiations of even first class paper very difficult, while inferior signatures are almost entirely negotiated or sold at ruinous rates of discount.

Exchange on New York is very firm, at ¾ to 1 per cent., with a demand fully up to the supply.

New Orleans exchange is not much inquired after; rates are ½ discount to par, buying and selling.

## W. G. HYNDMAN'S



## Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

## Union Works, Baltimore.

## POOLE &amp; HUNT,

## Iron Founders &amp; General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

## Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAKING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap3

G. W. MORRILL. G. B. BOWERS.

## MORRILL &amp; BOWERS,

(Successors to and members of the late firm of C. W. ASON & CO.)

## CLEVELAND, OHIO,

Are prepared to execute all orders for

## Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Watson, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases. ap16



## CINCINNATI AND MACKINAW R. R.

We have given in a few past numbers of our "Record," the condition and prospects of the various enterprises that are constructing or projected to connect Cincinnati with the important point at the Straits of Mackinaw. We give below an article from the "Greenville Journal," on the subject of the Cincinnati and Mackinaw R. R. It was called forth by a notice of a meeting of the citizens of Darke county, at which the following resolution was adopted:

*Resolved*, That the citizens of Darke county will, without delay, raise an amount of stock in the Cincinnati and Mackinaw Railroad company, sufficient to provide the right of way, and grade said road through the entire limits of this county.

The article to which we refer is from the Journal of April 1, and is as follows:—

THE MACKINAW RAILROAD, A FEW REASONS WHY IT SHOULD BE BUILT.—A number of our fellow-citizens attended a meeting at Dayton on Tuesday evening last, convened for the purpose of consultation as to the best means of securing an united and energetic movement on behalf of the construction of the Cincinnati and Mackinaw Railroad. It was expected that several gentlemen from Michigan, composing, in part, the organization in that State, would be in attendance at that meeting; but owing to circumstances beyond their control, they did not reach Dayton until the next morning.—We had the pleasure, however, of meeting with them on Wednesday, and were highly gratified at the favorable report which they made in regard to the prospects of an early commencement and vigorous prosecution of the work in the State of Michigan. The munificent grant of public lands made by the General Government in aid of the Road, it is thought by these gentlemen, places its early construction in that State beyond all contingency. Indeed, it is understood that a company in Michigan and New York have already proposed to construct and equip the road in Michigan for the Lands owned by the company. Be this as it may, it is quite certain that the *thirteen hundred thousand acres of Lands* given to the company by Congress will be amply sufficient to grade and equip the road from the Michigan State Line north to Traverse Bay. The feeling of the Directors of the road in Michigan, as far as we have been able to learn it, is favorable to the adoption of the route through Greenville to Cincinnati;—and we are satisfied that if any other line be finally adopted, it will be the fault of the people residing in the western tier of counties in this State, whose interest it is to make whatever effort may be necessary to secure the road. Ours is the shortest, and the only natural outlet South, for the Michigan company, and they *know* it; and if we show the proper interest, and make, *promptly*, the necessary effort, we shall have no difficulty in placing ourselves upon the line of this road, which is destined to become one of the greatest and most important commercial thoroughfares in the United States. Indifference or tardy action *may*, and probably *will* lose us the road; but united, energetic, *prompt* action, will most certainly secure it. Should this effort be made? We say, *yes*; and for the following, among other reasons:

1st. It will render productive and profitable, our previous investments in Railroads, by throwing upon the line of the Greenville and Miami Railroad an amount of business which cannot fail to make it one of the best *paying* roads in Ohio. This increased business will be derived not only from the *main line* of the Cincinnati and Mackinaw Railroad, as it pene-

trates the counties lying north of us, in Ohio and Michigan, bringing to our road the carrying trade and passenger traffic of those counties; but it will also draw from other eastern and western lines of road, which it crosses, in its progress to the northern lakes, all of the business of those roads which is seeking the city of Cincinnati; and which is now *forced* over circuitous routes to that great central mart of the West, for the reason that a shorter, cheaper and better route cannot at present be employed. This is true in regard to *every line of road* which it will cross between Greenville and Traverse Bay.

Let us see what effect the extension of this road from Greenville north to Van Wert, will produce. At Van Wert, (54 miles north of us,) the Cincinnati and Mackinaw Railroad will cross the road leading from Pittsburg through Fort Wayne to Chicago. The advantages of this connection not only to the Greenville road, but to the *whole line*, (which of course will share in the profits of all its business,) cannot easily be over-estimated.—It not only secures for the *consolidated road* all the Cincinnati business of the Pittsburg, Fort Wayne, and Chicago Railroad; but it at once and for all time to come constitutes our road the *shortest line between Dayton and Chicago!* and will consequently bring over the road from Dayton to Van Wert all the Eastern and Western business and travel between these two important Railroad centers! But in order that there may be no cavil in regard to this point, we subjoin the "*facts and figures*," which will be sufficient to demonstrate our proposition. The following are the

## DISTANCES BETWEEN DAYTON AND CHICAGO.

By way of Indiana Central R. R. Route.

Dayton to Indianapolis.....	108 miles.
Indianapolis to Lafayette.....	64 "
Lafayette to Michigan City.....	91 "
Michigan to Chicago.....	57 "

Total distance..... 320 miles.

This is at present the shortest route between Dayton and Chicago, and it is consequently the line of travel adopted by very nearly all the passengers destined for Chicago and the northwest from Dayton. Let us see what are the

## DISTANCES BETWEEN DAYTON AND CHICAGO.

By way of Greenville and Van Wert.

Dayton to Greenville.....	34 miles.
Greenville to Van Wert.....	64 "
Van Wert to Chicago.....	179 "

Total distance..... 267 miles.

Difference in favor of Greenville and Van Wert route, 53 miles.

But this is not the *only* advantage which this line would have over the Indiana Central, as a Dayton and Chicago route. On the Indiana Central route there are *three* changes of cars—one at Indianapolis, one at Lafayette, and one at Michigan City. By way of Greenville and Van Wert, there would be but *one* change, and that at Van Wert, where passengers would take the cars of the Pittsburg, Fort Wayne and Chicago road. We have then, by this line, a saving of *fifty-three* miles in travel, and two changes of cars—equivalent to *two and a half hours in time*—and at the same rates of fare per mile, a saving of *one dollar and fifty cents* in the price of a through ticket. Anybody can see that with such advantages the route via Greenville, Van Wert and Fort Wayne would at once be adopted by the traveling public; and freight would of course follow. This connection would more than double the present business of our road, and render the stock in the first Division of the Cincinnati and Mackinaw road a good investment from the beginning. If we were not to look beyond this connection, it is clear that it would be the interest of the lines already constructed, to make it at once.

We intended, when we commenced this article, to adduce various other reasons in

support of the wisdom and policy of vigorous and prompt action in aid of the construction of this great work; but the subject grows upon us, and we shall be compelled to defer our remarks upon them until our next issue, when we shall have something to say of the business which this line would derive from the Traverse Bay, Grand Rapids and Indiana Railroad, now in process of construction, and which will have its southern terminus at Fort Wayne—and also make some remarks of a like character in reference to the business which must be thrown upon this line, from those of the Wabash Valley, Michigan Southern and Northern Indiana, and Michigan Central Railroads, all of which will be crossed by the Cincinnati and Mackinaw Railroad, between Van Wert and its northern terminus at Traverse Bay.

The right spirit begins to characterize our people in reference to this important work, and we take great pleasure in saying to the friends of the work abroad, that Darke county will not be behind the *foremost* in furnishing her share of means to push forward this gigantic enterprise to a speedy and successful consummation.

## OVERLAND ROUTE TO CALIFORNIA.

In the act making appropriations, for the service of the Post Office Department for the year ending June, 1858, we find the following sections in relation to an overland mail from the Mississippi river to San Francisco.

Sec. 10. And be it further enacted, That the Post Master General be, and is hereby authorized to contract for the conveyance of the entire letter mail, from such point on the Mississippi river, as the contractor may select, to San Francisco, in the State of California, for six years, at a cost not exceeding three hundred thousand dollars per annum, for semi-monthly, four hundred and fifty thousand dollars, for weekly, or six hundred thousand dollars for semi-weekly service, to be performed semi-monthly, weekly or semi-weekly, at the option of the Postmaster General.

Sec. 11. And be it further enacted, That the contract shall require the service to be performed with good four horse coaches, or spring wagons, suitable for the conveyance of passengers, as well the safety and security of the mails.

Sec. 12. And be it further enacted, That the contractors shall have the right of pre-emption to three hundred and twenty acres of land not then disposed of, or reserved, at each point necessary for a station, not to be nearer than ten miles from each other; and provided that no mineral land shall be thus pre-empted.

Sec. 13. And be it further enacted, That the said service shall be performed within twenty-five days for each trip; and that, before entering into such contract, the Postmaster General shall be satisfied of the ability and disposition of the parties, bona fide, and in good faith, to perform the said contract, and shall require good and sufficient security for the performance of the same; the service to commence within twelve months after the signing of the contract.

BALTIMORE AND OHIO R. R.—The machine shop of the Baltimore and Ohio Railroad at Wheeling was destroyed by fire on April 20. The loss to the company is estimated at \$30,000.



# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



For Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **WRITING**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

**JAMES J. BUTLER, Agent.**—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton Railroad; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana; and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
**JAMES H. MORLEY, St. Louis, Mo.**  
or **SUNNER SMALL, Boston, Mass.**

### Thorough Bred Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**  
"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

T. WRIGHTSON.

### TO PRINTERS.

### Large Cylinder Hoe Press FOR SALE.

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once.

Address **WRIGHTSON & CO.,**  
167 Walnut street, Cin'ti, Ohio.

N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.  
ap8-1m **W. & CO.**

### ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

**Blank Book Manufacturers,**  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

**RAILROAD AND OTHER BLANKS,**  
Printed to order in the best manner.

**Ruling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

**ANDERSON, GATES & WRIGHT,**  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

**CHARLES ELLET, Jr., Civil Engineer.**  
No. 298 H Street, Washington, D. C. apr12

### FOR SALE.

**TWO HOUSES** nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

**WRIGHTSON & CO.,**  
167 Walnut street, Cin'ti, Ohio.  
ap8-1m

### SILVER, GOLD, LEAD,

And Other Minerals;

ON THE PROPERTY OF THE

### Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity. Valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the handiwork of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

**EDGAR CONKLING, A't** for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

### Norris' Locomotive Works.

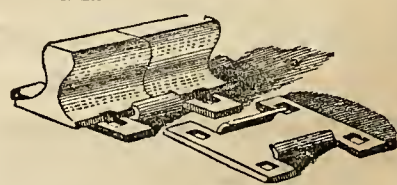


PHILADELPHIA.

**ENGAGED** for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy.27. **RICHARD NORRIS & SON.**

### RAILROAD SPIKES.



WROUGHT IRON

### Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, **HOOK & FLATHEAD R. R. SPIKES**, of all Patterns, **WROUGHT AND CAST CHAIRS**, and **FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES**, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch. **J. HOPKINSON SMITH**  
No. 25, South Charles

Please direct the name in full.  
Baltimore August 31-7



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12.30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6.30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton

THE A Steamer leaves Racine for Chicago every evening at 10.30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President,  
ROBERT HARRIS, Asst. Sup't.

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEW & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [Jan. 1st] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St., PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns.

Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-ly

## E. MENDENHALL,

MAP, BOOK & PRINT SELLER,  
Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES

### DRAWING INSTRUMENTS, &c.

Publisher of the

### Railway Map of the Western States,

In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP of OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON CO. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

### MAPS OF EVERY DE CRIPTION.

mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

### Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafing, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated beats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYE METALLIC SELF ADJUSTING CONICAL PAGING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,  
Consulting Engineer,

64 Broadway, N. Y.

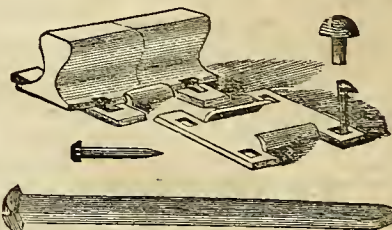
## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD. RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological maps prepared. mar1-ly

## GREAT WESTERN Railroad Chair and Spike Works.



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

feb 28 CORBY, GOSS & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

Supt Terre Haute &amp; Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducting. Sold at wholesale at great discount from list prices.

6633-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

## THROUGH TICKETS VIA.

WHEELING.  
PITTSBURGH.  
DUNKIRK.  
BUFFALO  
NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L.  
Office No. 2 Burnet House.

Jan 2

1856.

1857. Spring Arrangement. 1857

## Cincinnati, Hamilton &amp; Dayton

## [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

## "STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburg Philadelphia, &c. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M. and 5:30 P. M. For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Supt.

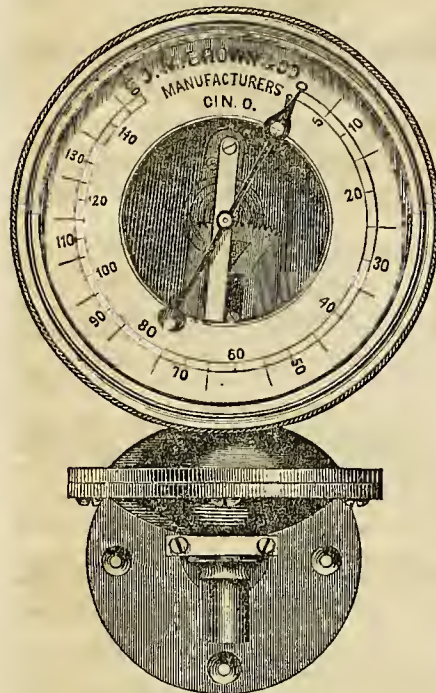
L. N. ANDREWS, Gen. Fr'ght. Ag't.  
Indianapolis, Sept. 16, 1856.

[mh29-1y.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

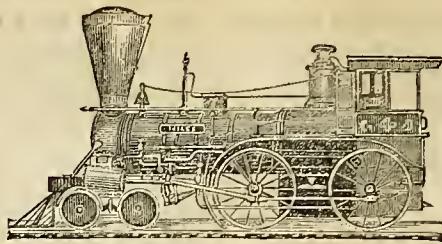
Every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, at shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1855. 9 South William Street.

### A. B. LATTA'S

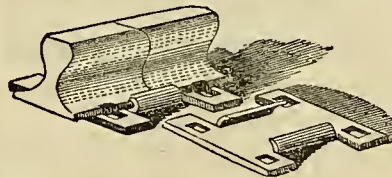
#### Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

ap17 A. B. & E. LATTA.  
J. B. GREEN, C. S. GREEN.

### CINCINNATI RAILWAY



### CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

#### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

Feb. 14 1y.

### THE SCHENCK MACHINERY DEPOT

AND  
Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

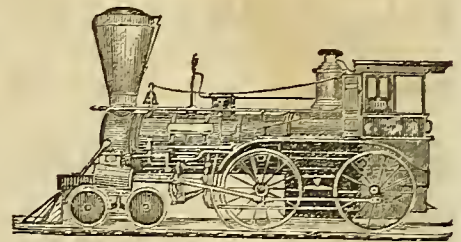
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

#### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR  
Aug. 9 1y

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, holts for bridges cut with dispatch.  
ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts. all sizes; Coach Lag and  
Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

Cotton Duck for Car Covering,  
Of any required width to 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trim-  
mings for win dows and Seats. Varnish, Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Belts, anti-friction or Babbitt Metal.

#### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
1856.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally in these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

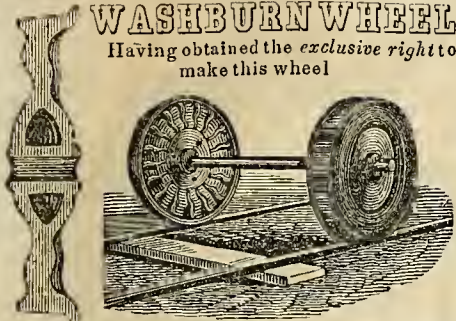
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855



### FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with this celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

Jan.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



#### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

#### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

#### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

#### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**

Jan. 1. Muskingum Works, Zanesville, O.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL  
**DAVENPORT, RUSSELL & CO.,**

### Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

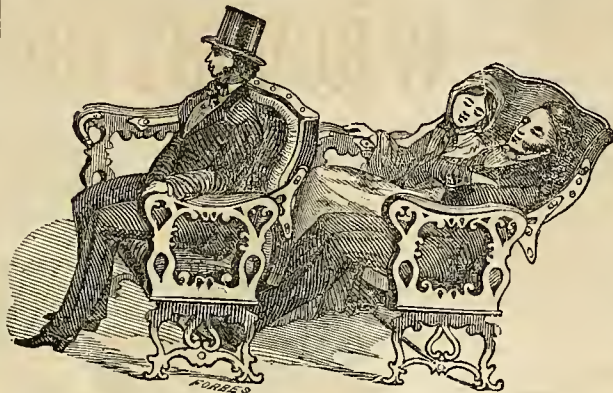
We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16<sup>th</sup> JOSEPH DAVENPORT.

### S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2<sup>d</sup> NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855.**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

### ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
**LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,**  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES

NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July 31

**THOMAS D. STETSON,**  
AND  
**Mechanical Engineer,**  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.  
Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc23

### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

aug14-ly P. DUDLEY,  
President of the Board.

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 56 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** feb19-1m 9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** no13 10 Wall st., near Broadway, New York.

### IRON BOILER FLUES, PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA. [aug]

### 'RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '66-2m.] **H. GOODMAN & CO.,**  
no. 7 Wall st., N.

### RAILROAD CAR AND

### COACH TRIMMINGS. DOREMUS & NIXON,

No. 21 Park Place, and 18 Murray st.,  
NEW YORK,

### IMPORTERS

OF  
**Plain and Figured Mohair Plush,**  
Printed & Uncolored, Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Enameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width.**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT,**  
FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation.  
sep13 **DOREMUS & NIXON.**

### RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,  
Between Fourth and Fifth Sts, Cincinnati



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-1y

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in hand, or duty paid. For sale by

THEODORE DEHON,  
feb5-1f 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 2d street, N. Y.

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**  
THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

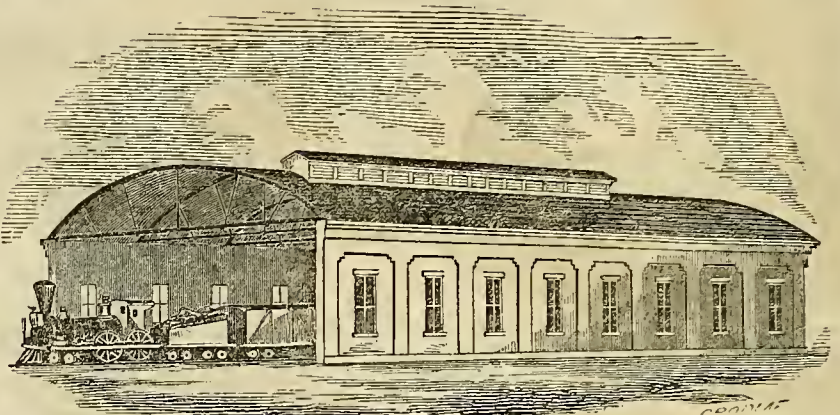
BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-1y 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



**Office, No. 57 West Third Street,  
CINCINNATI, OHIO.**

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of Iron Supporting now in use, and no more than good wooden Trusses; besides, this plan of roofing gives a fine architectural appearance. is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

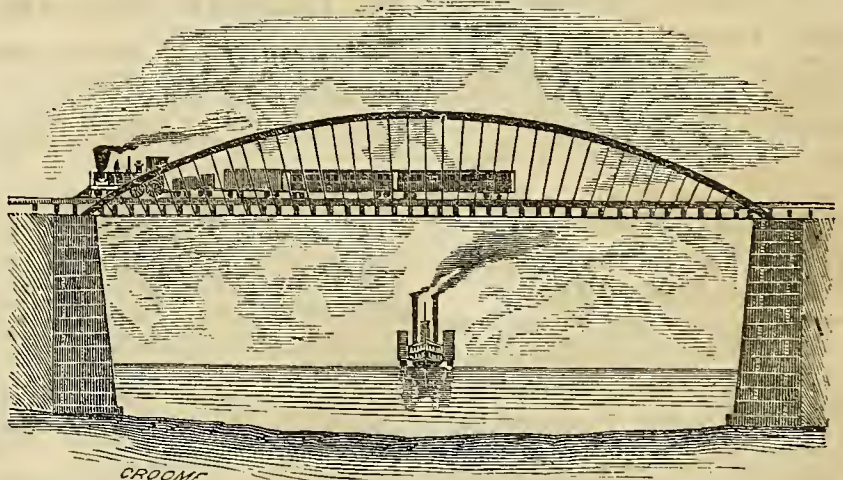
MOSELEY, WINSTON & MOSELEY.

January 1st, 1856.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



**Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.**

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being of *lute iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranty sustained by responsible obligations.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

**THOS. W. H. MOSELEY.**

Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....APRIL 30, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

ADVERTISEMENTS—	
One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to

WRIGHTSON & CO.,

Publishers and Proprietors,

### CONTENTS.—No. 10.

#### EDITORIAL.

The Condition and Prospects of Railroads.....	145
Sonora Exploring and Mining Company.....	145
Brevities.....	145
Iron Bridge.....	153
RAILROAD DACTYLOTYPE.	
Keokuk, Mt. Pleasant & Muscatine R. R.....	146
RAILROADS.	
Ashtabula & New Lisbon R. R.....	146
Keokuk, Mt. Pleasant & Muscatine R. R.....	148
Baltimore & Ohio R. R.....	149
Peoria & Hannibal R. R.....	149
LaCrosse & Milwaukee R. R.....	154

#### MISCELLANEOUS.

Poole & Hunt's Machine Works, Baltimore.....	149
Turpentine Manufacture.....	150
Earnings.....	147
The Railroads of Maine.....	151
Good Advice.....	151
An Australian Copper Mine.....	151
Morris Canal Co.....	151
The National Wagon Road.....	153
Indianapolis & Cincinnati R. R.....	153
Fall of the Genesee Suspension Bridge.....	154

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	152
London Quotations.....	153
Cincinnati Stock Sales.....	153
Monetary and Commercial.....	153
Sales at the New York Stock Board.....	153

#### SONORA EXPLORING & MINING CO.

We have been shown a piece of silver just received at the office of this company, from its Agent at Tubac. It is the product of a single pound of the ore of the Heintzelman Mine, and weighs one ounce, one pennyweight and sixteen grains Troy. The results of the late researches show the Heintzelman group to cover twenty veins, each of which will yield over thirty mares to the carga. We congratulate the company on the reception of these news. They cannot be otherwise than highly satisfactory; and, while mentioning these facts, we take no little pride in stating that the credit of the first successful company sent to the Gadsden Purchase is due to Cincinnati. We trust her enterprising citizens will reap their reward.

Vol. 5.—No. 10.

### THE CONDITION AND PROSPECTS OF RAILROADS.

Some months since we expressed the opinion that, notwithstanding the depression of railroad stocks, and the heavy debts of many of them, this sort of property would certainly revive, and eventually prove (we mean for main lines prudently managed) among the best species of property for income. The reasons given for this opinion may be briefly stated thus:

1. That the traffic of the roads was increasing at a rapid rate, and would continue to do so, and that this must produce a good effect on stocks.

2. That most of the roads were incomplete, and these were obliged to use their income to complete them—could not divide dividends, which occasioned a temporary want of confidence.

3. That the same was true of floating debts, which would soon, however, be paid; and when the roads were completed, and the floating debt paid, large cash dividends would be paid.

4. That these movements were begun, and were going on favorably, and that the result must be in the highest degree favorable to the interests of the road.

These were the reasons we gave for a more favorable view of the condition of railroads. In point of fact, this process has been going on, and already we have very good results; but, of course, there is yet more time required to produce the whole effect we anticipate. As an example of the increase of traffic, we give the following receipts for March:

#### RAILWAY TRAFFIC FOR MARCH.

	1857.	1856.
New York Central.....	\$674,302	\$521,200
Pennsylvania Central.....	590,875	520,188
Baltimore & Ohio.....	648,262	405,800
Michigan Southern.....	205,860	190,346
Michigan Central.....	206,509	191,795
Cleveland & Toledo.....	51,847	22,625
Cleveland & Toledo.....	121,549	92,000
LaCrosse & Milwaukee.....	47,833	27,226
Milwaukee & Mississippi.....	40,186	30,563
Catawissa & Erie.....	24,179	13,902
Chicago, St. Paul & Fond du Lac.....	37,090	12,566
Little Miami, Columbus & Xenia.....	99,105	89,000
Harlem.....	88,550	92,113
Galena & Chicago.....	120,099	127,191
Pacific, Mo.....	54,886	30,083
Chicago & Rock Island.....	132,000	97,114
Illinois Central.....	170,000	137,000
Pittsburgh & Fort Wayne.....	163,228	120,905
Wabash Valley.....	55,619	new.
Cleveland & Columbus.....	106,287	102,700
Williamsport & Elmira.....	29,377	7,289
Delaware & Lackawanna.....	122,311	24,846
Terre Haute & Alton.....	80,000	40,949
New York & Erie.....	502,560	460,619
Mad River.....	49,341	42,211
Indianapolis & Cincinnati.....	50,977	44,634
Hudson River.....	187,108	229,323
New York & New Haven.....	76,963	69,948
Madison & Mississippi.....	30,000	.....
Allegheny Valley.....	6,803	.....
Chicago & Burlington.....	129,221	114,756
Toledo & Wabash.....	55,649	.....
N. J. Central.....	76,078	39,135
Lehigh Valley.....	34,181	11,062
Scioto & Hocking Valley.....	13,823	9,970

Aggregates.....\$4,980,707 \$3,992,665  
Increase over last year (30 per cent).....\$1,658,052  
No. of Lines..........33

The increase of traffic for the month of March has been enormous; and if the aggregate receipts of these lines be taken for the whole year it will approach sixty millions of dollars!

The capital actually invested in these roads is about two hundred and ten millions. If, now, we allow 55 per cent. for the expenses (and it is a large allowance), we shall have 45 per cent. net, which is about twenty-seven millions net

profit. That is, the roads will pay 12 per cent., and leave a handsome sum for contingencies!

But, some one will say, where are the dividends? This is precisely the question we met in the first instance. Nearly all these roads have been paying off floating debts, and completing their work. It is true the stockholders receive nothing except in the intrinsic value of their roads. But, is this not a real, positive addition to their property? It is true, and unfortunate as true, that, notwithstanding this is a real addition to the value of the stock, it adds little to its value on the Stock Exchange. We are also aware that there are many stockholders unable to hold their stock; but, to all such as can, we say, "hold your stock," unless it is near par value. The reasons we have given above. In the year past most railroad stocks have risen, and the tendency now is decidedly upwards; and, on the face of such facts as we give above, how can it be otherwise? There is a steady increase of traffic, and a steady diminution of floating debts. In a short time most companies will pay out their earnings as cash dividends; and when they do the whole railroad interest of the country will rapidly rise. The depression in railroad stocks has been caused almost entirely by the failure to pay cash dividends. When dividends are made, the whole face of affairs will be changed—and to that result we are rapidly tending.

#### BREVITIES.

—GALVESTON, HOUSTON AND HENDERSON R. R.—The iron had been laid on this road up to April 11, 13½ miles. The road was then complete to beyond Dickinson's Bayou.

—NORTHERN PACIFIC R. R.—The legislature of Washington Territory has chartered a company to build a railroad commencing at any of the passes of the Rocky Mountains, by Bitter Root Valley and crossing the Cœur d'Alene Mountains as the most practicable point; thence across the great plains of the Columbia and thence with two branches, one to Vancouver and the other to the Sound.

The capital stock of the company is to be fifteen million dollars, with a privilege of increasing to thirty millions. The organization is to take place when \$150,000 have been subscribed and five per cent. paid in. The road must be begun within three and completed within ten years.

Among the corporators by Gov. Stevens to the residents of the territory are Alexander Ramsey, H. M. Rice and James Shields, of Minnesota; John Fitzgerald, Julius White and James Duane Doty of Wisconsin; H. H. Gear, John B. Turner and Ira Minsrd, of Illinois.

—MILWAUKEE & LACROSSE R. R.—At the recent annual election of this company held in Milwaukee, the following gentlemen have been elected Directors: Byron Kilbourn, Stephen H. Alden, Edwin H. Goodrich, Garrett Vliet, Moses Kneeland, Jackson Hadley, Henry L. Palmer, Samuel Brown, Charles E.



Jenkins, Moses M. Strong, Benj. F. Hupkins, Hugh McFarlane, D. D. Cameron.

—GRAND TRUNK R. R. Co., CANADA.—We notice an act before the provincial legislature of Canada to repeal the act which establishes "Government Directors."

—MILWAUKEE AND HORICON R. R.—This company are endeavoring to raise an additional stock subscription of \$1,250,000, for the purpose of extending the road from Stevens' Point on the Wisconsin river to lake Superior or the St. Croix river, a distance of 180 or 195 miles.

"The plan for extending the road through this section of the country and conferring to a large extent upon the stockholders the benefits created by their capital, expended in the construction of the road, is as follows: the Company propose to purchase of the United States one million acres of land at \$1.25 per acre, to be selected along and as near to the route which shall be adopted to be occupied by the railroad, as first quality lands can be found, purchasing none but the best and most valuable land in the country. One-half of this land will be used by the company to build the railroad and the other half will be set aside, for a specified length of time, to purchase from the holders one-half of the additional stock.

After the land is purchased and the line of the road located, the land will be divided, as near as may be, into 80 acre tracts, reserving in all cases to the company, right of way, 100 feet wide, and also at stations sufficient depot grounds. Then all lands suitable for that purpose, will be laid out into town and village lots. For each and every \$200 paid in by a subscriber to the additional stock, he will receive two full paid shares of the capital stock of the Milwaukee & Horicon Railroad Company, one of them to be the ordinary full paid stock and the other privileged stock, to be purchased by the company and paid for in land, providing the owner shall elect to so dispose of it under the regulations prescribed by the company, otherwise to remain an investment in the stock the same as other full paid shares. The arrangements will be such that the owner of each and every share of the privileged stock, will be offered for the same, by the company, an 80 acre tract of land, or such other quantity as may be obtained by the company for \$100. In making the offer of land for stock the company will, by some fair means devised by them, so arrange matters that any tract of land to the amount of 80 acres, or such other quantity as may be obtained for the sum of \$100, may be offered for any one share of the privileged stock. In other words any one holding a share of the privileged stock may be offered for the same any one of the tracts (80 acres as near as may be) however valuable, and at the same time it may so turn out that one of the least valuable tracts may be offered him; one thing, however, is guaranteed, no partiality or favoritism will or can be shown in any case.

—CHICAGO, ST. PAUL AND FOND DU LAC R. R.—The *Tribune* yesterday gave currency to certain street rumors of large losses sustained by the above Company through the failure of an English house that holds a large amount of its bonds. The facts in the case we learn from the best of authority to be the following. Dodge, Bacon & Co., (the English house alluded to,) refused to accept cer-

tain drafts drawn upon them by the Company's agent, and these returning unexpectedly, led to some temporary inconvenience. The same house hold bonds of the Company to the amount of \$136,000, which they offer to surrender to the Company on conditions that the latter have accepted. If this arrangement is consummated, and it probably has been before this time, there is no probability that the Company will suffer anything through the failure of the English house, except the temporary inconvenience attendant upon such an event. Out of the foregoing facts has been manufactured the story of the loss of a million of dollars, and of Mr. Ogden's departure to Europe.—*Daily Press*, 22nd.

—KENOSHA, ROCKFORD AND ROCK ISLAND R. R.—The first division of the road, from Kenosha to Rockford, is now under contract, and will be completed this season. Much of the heaviest portion of the work is from Kenosha to Fox River, a distance of twenty miles, and on this part there has been already expended over \$350,000. There are six miles of track well ballasted and ready for operations. The estimated cost of this portion of the road, seventy miles, is \$1,540,000, to meet which the company has now secured in bonds and subscriptions, \$1,800,000.

—MILWAUKEE AND MISSISSIPPI R. R.—The excursion train over this road to Prairie Du Chien on April 15, was a very pleasant affair

—ALABAMA AND FLORIDA R. R.—This work is progressing steadily as will be seen from the following extract from a letter from the Chief Engineer.

"Everything connected with the progress of our Railroad to Pensacola is in a flourishing condition, not only so far as relates to the work, but public sentiment is setting very strongly in its favor—I am satisfied that by the fall the whole unlet portion of the work (grading I mean) will be placed under contract. In a few months we shall be running to Fort Deposit, 32 miles from Montgomery; Greenville is now raising a subscription to continue the road uninterruptedly to that town. I never myself felt more encouraged at our prospects, and confidently rely on going to Pensacola by rail during the year 1859."

"The Southern Railroad from Vicksburg to the Alabama State line, I learned yesterday, is all under contract with the exception of 40 miles of light work. The books have within a few days been opened for the extension of the Railroad from Selma to Union to meet the Southern road at the State line. The only gap in the road through which is required to complete the great line from Texas to Montgomery is the small space between Selma and Montgomery, and I shall be disappointed if that is not filled and Pensacola connected with the coal fields by the time we reach the Florida line."

—BALTIMORE & OHIO R. R.—In the case of the Mayor and City Council of Baltimore vs. The Baltimore & Ohio R. R. Co., Judge Krebbs decided on Saturday last that the petition of the stockholder directors to be made parties defendants in the bill, could not be granted. This, in effect, withdraws the whole question before the court, as the new city and State directors had voted the withdrawal of the answer to the bill.

—PENNSYLVANIA PUBLIC WORKS.—The bill just passed the House of Representatives of this State, provides for the sale of the Main Line of Public Works at a price of \$7,500,000. If the Pennsylvania R. R. Co. is the purchaser, the tonnage tax is to be withdrawn for an additional sum of \$1,500,000.

## Railroad Daguerreotypes.

No. LXXIX.

KEOKUK, MT. PLEASANT & MUSCATINE R. R.

The report of this road is dated January, 1857. The following are its officers:

President—LAURIN DEWEY.

Treasurer—CHARLES PARSONS.

Secretary—J. W. OGDEN.

Superintendent—J. K. HORNISH.

Chief Engineer—J. A. McDOWELL.

DIRECTORS.

LAURIN DEWEY, Mt. Pleasant.

J. B. LASH, "

ROBT WILSON, "

R. ALLEN, "

C. N. McDOWELL, "

J. K. HORNISH, Keokuk.

J. W. CLEGHORN, "

J. M. HIATT, "

WM. PATTERSON, "

D. W. KILBOURNE, "

FRANCIS SPRINGER, Columbus City.

The capital stock of the road is \$570,950.

The DEBTS of the road are:

1st mortgage.....	\$1,000,000.
Interest.....	8 per cent.
When due.....	Jan., 1877.
Interest payable.....	Jan. and July.
Trustee.....	J. Edgar Thompson, of Philadelphia.

Road not finished.

Length of road.....68½ miles.

Termini.....Keokuk and Muscatine.

## Railroads.

ASHTABULA & NEW LISBON R. R.

The Annual Report of this company is now before us. It contains an interesting report from Prof. Newberry on the geology of the line, from which we shall take occasion to make future extracts. The report of the President gives the position of the road as to work done and future resources. The report says:

"Since our last annual meeting your Directors, in May and June, as early as the long continued winter would permit, caused the road to be surveyed and located from Niles to New Lisbon; but from a steep and long grade from the center of Canfield to the center road at Greene, and also from Washingtonville to the Ohio & Pennsylvania Railroad, and also from the further consideration that in grading a long hill, almost invariably a few feet from the surface we meet with blue clay, almost as difficult to excavate as rock, and our stuck upon this part of the line being too small for



so large a job, we have surveyed a new line from Canfield to Greene, by going a short distance east, and avoiding nearly the whole hill, and only increasing the distance twenty-four feet, and saving in the estimate \$25,569 83.

"The estimates on the first line, as made by the Engineer, amount to \$43,984 50, and upon the newly surveyed route to \$18,414 97. Upon the first route it was impossible to estimate what it would cost without knowing what earth would be found. Upon the last surveyed route there is no uncertainty about it, for it is almost an entire plain. The same remarks hold good in relation to the proposed change at Washingtonville. The first estimate was \$27,623 20, the last is only \$15,377 58—a saving of \$12,145 62. Saving in both changes, \$37,715 45.

"The road is let from New Lisbon to the Ohio & Pennsylvania Road to Messrs. Britton, who began work on the 13th day of August, and have progressed from that time until the present successfully, and have performed a large amount of work for the number of hands employed. We have the utmost confidence in their ability to perform the work. The estimates of their work from the 13th of August to the 1st of January is \$7,317 16. They have performed more than double the amount of work they were required to do in the time, yet the whole amount has been promptly paid by the stockholders at New Lisbon, under the efficient management of Director McClymonds; and, from present prospects, that section from New Lisbon to the Ohio & Pennsylvania Road, a distance of ten miles, will probably all be graded before our next annual meeting.

"The road is also let from the Ohio & Pennsylvania Road to the center of Austintown to O. Baldwin & Co., and they have commenced work at Washingtonville with a small force, and from the character of the earth they have been able to progress with great success; and by making the proposed change we are now able to progress with the whole distance to the center of Canfield, which will be immediately begun, unless the winter is unfavorable for work, and we have strong confidence that the road from New Lisbon to the center of Canfield will all be graded during the present year.

"The right of way from New Lisbon to the Ohio & Pennsylvania Road has all been obtained except three or four farms, and in almost every instance has been given without pay. All that has been agreed to be paid is about seven hundred dollars.

"A very considerable portion also has been obtained from Niles south to the Ohio & Pennsylvania Road on fair terms. We think we can safely say, from what has already been done upon this branch of the business, our

"From Austintown to Niles the contract to let the work is not fully completed. At our last annual meeting our expectation was to let that portion first, and immediately begin the work and prosecute it to completion, and commence business upon it; but, upon further reflection, we changed our policy, and deferred that portion for the year, to let business and capital be a little more developed, which is fast being done.

"The progress of the work north and south of Niles, and in that immediate neighborhood, together with the additional uses that are being made of coal and ore upon the ground, must, from the nature of business, in the course of the coming year, bring a large number of people and amount of business capital upon the immediate line of the road, to be there employed and expended in the erection of furnaces, opening of coal banks, and all that appertains to it, will grade that section of the road the coming year in all probability.

"Messrs. Porter & Co. now have an extensive and very commodious coal opening, and are making extensive preparations for the erection of a large furnace early in the coming spring, upon the immediate line of the road.

"Your Directors, in the month of October last, procured the services of Prof. Newberry, an eminent geologist, from Washington City, of great skill and science in his profession, and in no way connected with our road, to make a geological survey of the road from Niles to the Ohio river.

"Earlier in October than Mr. Newberry came upon the road, we were informed by a wealthy and reliable individual that as soon as we would extend our charter from New Lisbon to the Ohio river, there were individuals (giving names) who stood ready to furnish all the means necessary to grade the road and prepare it for the iron from New Lisbon to the river. We had Mr. Newberry prosecute his examination to the river, and his report is here appended and made a part of our report, and with this geological report it is unnecessary to say more about the minerals upon the road, than that no other road in the State of Ohio or elsewhere, for a distance of fifty miles, one-half its whole length, does more richly abound in highly valuable minerals. Indeed, in addition to the mineral resources, the whole line of the road from Ashtabula to New Lisbon, passes through a highly cultivated country, rich in agricultural products. The county of Ashtabula is the greatest dairy county in the State. They have not heretofore turned their attention much to the raising of grain.

"Columbiana county is among the best grain growing counties in the State, and the people from the lake counties, for years past, have been in the habit of drawing large quantities of grain from there over our mud roads, and

road will compare favorably with any other road in Ohio.

this will continue, as it is more profitable for the people of Ashtabula, Lake and Geauga counties to graze their lands, rather than raise grain. The counties of Trumbull and Mahoning are large producing counties, and abound with cattle, sheep and hogs equal, or nearly so, to any in the State.

"There has been expended in work upon the North Section of our road, from the lake to Bristol, the past year, fifty-three thousand seven hundred and eighty-one dollars.

"The country north of Niles is entirely destitute of coal, lime and hydraulic cement, and, to a great extent, of building stone. The southern part of our line abounds in great abundance in these articles, and of the best quality, and their use is greatly increasing every year.

"Our road does not now owe but \$3,000, except as above stated, borrowed on a mortgage of a piece of land, in order to give us an opportunity to sell when land is in better demand than this year. As we have heretofore said, we are substantially and prosperously at work on both ends of our road, with a full and fixed determination never to suspend work until it is all finished.

"After our last annual meeting, until the middle of April, very little business could be successfully done, owing to deep snows and severe cold weather, either in work upon the road or in obtaining stock.

"Since then our time has been taken up in locating the road, obtaining the right of way and new stock in those locations where we wished to begin the work and in prosecuting it.

"We have obtained in New Lisbon sixteen thousand dollars in new stock, and in Canfield six thousand dollars, and north of Bristol eight thousand dollars.

"We have now in available unexpended stocks, lands and other assets, on the north division of the road, \$127,677, and on the southern, \$121,461."

The total length of this road, from Ashtabula to New Lisbon, is 84.63 miles. The highest summit attained is at Canfield, 585 feet above Lake Erie. The heaviest grades are 31.7 feet.

The officers of the road are :

DIRECTORS.—Eben Newton, President; Henry Hubbard, Vice President; Henry Fassett, Secretary; James Stone, Wm. H. Howe, George C. Reis, John McClymonds.

O. H. Fitch, Treasurer; Wm. Hale, Chief Engineer; Prof. John S. Newberry, Geologist.

INDIANAPOLIS & CINCINNATI R. R.—The earnings of this road for March, 1857, were as follows :	
Passengers.....	\$26,018 17
Freight.....	23,687 15
Mail and Express.....	1,272 68
	\$50,977 40
March, 1856.....	44,654 35
Increase.....	\$6,323 05



**KEOKUK, MT. PLEASANT & MUSCATINE R. R.**

We have before us the Annual Report of the President of this company. Its operations have been conducted silently but yet surely. Its officers are as follows:

*President*—Laurin Dewey.

*Secretary*—J. W. Ogden.

*Treasurer*—Charles Parsons.

*Gen. Agent and Sup't*—J. K. Hornish.

*Chief Engineer*—J. A. McDowell.

*Executive Committee*—Laurin Dewey, J. M. Hyatt, J. W. Cleghorn.

*Board of Directors*—Laurin Dewey, J. B. Lash, Robert Wilson, R. Allen, C. N. MacDowell, Mt. Pleasant; J. K. Hornish, J. W. Cleghorn, J. M. Hyatt, Wm. Patterson, D. W. Kilbourne, Keokuk; Francis Springer, Columbus City.

*Trustee*—J. Edgar Thompson, of Philadelphia, Pa.

The Report says:

"A company having been organized for the construction of the above road so quietly and unostentatiously as scarcely to have attracted the attention of the public press, it is now deemed proper to present its condition and prospects in a more formal manner, for the consideration of the public.

"This road extends from the city of Keokuk, by way of Mt. Pleasant and Columbus City, to Muscatine, and thence connects, by means of the Junction and Davenport & Iowa City Roads, with the bridge across the Mississippi river at Rock Island. With these connections it traverses the counties of Lee, Henry, Louisa, Muscatine and Scott—five of the oldest, most populous, productive, and wealthiest counties of the State of Iowa. It crosses and connects, directly and indirectly, with six railroads located across the State from east to west, and is intended to connect the permanently navigable waters of the Mississippi below the Des Moines, or Lower Rapids, with the river above the Rock Island obstructions. As a link in the great chain of roads now projected, and which will ultimately be built, connecting New Orleans with St. Paul and Lake Superior, this road has peculiar merits. While it traverses the most productive country of the Mississippi valley, it also connects with the river so often, and at such commercial points, as to insure for itself the largest amount of business, and that, too, without the fear of successful rivalry. Its construction, therefore, is an enterprise of great importance, not only to the people of the State, but also to all who are interested in the trade, present and prospective, of the Upper Mississippi.

"From the railroad bridge at Davenport the road is completed to Muscatine. From Muscatine to Columbus City, the place of junction, the track is nearly ready for the cars, and will be in full operation by April 1st, 1857. To this point surveys have been made by the

Keokuk, Mt. Pleasant & Muscatine Railroad Company, showing the distance from Keokuk to be 68½ miles. The estimate of cost for the construction and equipment of a first class road for this distance, 68½ miles, is \$1,600,000, as given in the report of the Chief Engineer.

"The first division, 11 miles, extending from the foot to the head of the Lower Rapids—from Keokuk to Montrose—is virtually completed. The entire road bed is finished, the masonry of which is done in the most substantial and permanent manner; the ties are delivered and distributed; water station and temporary sheds erected; locomotives and cars on the ground; and the iron purchased and paid for, and about three miles laid. It was confidently believed, at the time of my last report, that this division would be in operation in time for the fall trade; but the low water in the Ohio river during all last season prevented the accomplishment of this object. Such, however, is our present condition, that we may safely say that this division will be in operation early in the ensuing spring.

"In this enterprise the K., Mt. P. & M. Co. has met with a hearty support from the public generally, and its present financial condition insures a rapid prosecution of the work. The amount of stock already subscribed and duly returned is \$570,950; of which \$450,000 is corporate, and \$120,950 private. Subscriptions taken as follows:

City of Keokuk.....	\$100,000
Lee county.....	150,000
Henry county.....	100,000
City of Mt. Pleasant.....	50,000
Louisa county.....	50,000
Citizens of St. Louis (private subscription)....	51,250
Citizens of Keokuk and Montrose.....	69,700
	<hr/>
	\$570,950

Satisfactory assurances have been given that the above amount will be increased \$425,000, as follows:

Louisa county, additional.....	50,000
Mt. Pleasant, ".....	50,000
Private subscriptions now being made.....	125,000
City and county of Muscatine and Davenport....	200,000

This will make the total amount of local and home stock taken.....\$995,950

"If to the above we add the right of way, already obtained at a nominal cost, and depot grounds at Keokuk, which have increased greatly in value, we shall have of total home assets over one million of dollars.

"Thus far the operations of the company have been confined to the resources arising from the sale of stock exclusively; the credit of the road has not yet been touched. This policy can be continued for the extension of the road, so far as regards the bed; but for the iron for the extension reliance must be had upon the credit of the road. To meet this, on the 27th day of October, 1856, the Board of Directors passed an order authorizing and directing the President to execute one thousand bonds, each for the sum of one thousand dollars, and to offer the same for sale, as more particularly set forth in said resolution; and to secure the payment of said

bonds, the President was authorized to execute a mortgage upon the said road and all its appurtenances; making J. Edgar Thompson, of Philadelphia, trustee in said mortgage or deed of trust. Said mortgage has been duly executed, recorded, and delivered to said trustee, and part of said bonds are ready, and now offered for sale.

"As an illustration of the growth of the country, and the ability of the people on this line of road to meet all their obligations, it is only necessary to refer to Mt. Pleasant and Keokuk.

"Mt. Pleasant in 1854 numbered a population of scarcely 1300, and had an assessed valuation of about \$400,000. Now it has a population of 5000, and an assessed valuation of \$1,500,000.

"In 1854 the city of Keokuk numbered a population of about 3000, and an assessed valuation of about \$1,125,000. Now it has a population of about 16,000, and an assessed valuation of about \$5,000,000. The entire country partakes largely of the growth and prosperity of these cities. The lands are being improved by substantial citizens—a small portion only being held by non-residents.

"A contract, regarded the most favorable to the company, has been concluded with Messrs. Sullivan & Templin, contractors on the first division, for the construction of the second division, extending from Montrose to Mt. Pleasant, a distance of 34½ miles. This, as our former contract, is made upon a cash basis, and kept entirely under the control of the Board. This arrangement, we believe, is dictated by the soundest policy. The stock and bonds usually taken by contractors, cannot be regarded other than as a bonus, for which no adequate consideration is returned. The local stockholders may at first be delighted with the idea; the result, however, is generally disastrous. Contractors build railroads to make money, not to spend money. If they take stock, they take it as an increased margin over and above a fair cash price, and to get such a control in the Board as will enable them to control the management of the road to their own interests. The history of railroading is so full of illustrations of this fact that we may learn wisdom from the errors of others. With fair cash prices for the work, and the full control reserved to the company, it is confidently believed that the road will be built within the cash estimates, the value of the stock preserved, and our credit maintained. This is our settled policy, and there is no desire to change it."

The financial condition of the company is given as follows:

Statement No. 1. Current Account.	Cr.
By capital stock subscribed.....	\$570,950 00
Bills payable.....	37,177 14
Sundries account.....	120 10

\$608,247 24



To installments due, unpaid.....	Dr. \$2,663 74
Bills receivable.....	4,075 00
Construction—iron, ties, &c.....	177,779 40
lands not needed for road.....	14,246 14
Rolling stock.....	34,620 00
Freights.....	4,861 71
Bonds, municipal and county.....	350,000 00
Cash on hand.....	1 65
	\$608,247 24

## Statement No. 2. Available Assets and Liabilities.

By cash.....	Cr. \$ 1 65
Bonds, municipal and county.....	350,000 00
lands not needed for the road.....	14,246 14
Installments due and unpaid.....	22,663 74
Bills receivable.....	4,075 00
	\$390,966 13

To Bills payable.....	Dr. \$ 37,177 14
Balance assets.....	353,808 97
	\$390,966 13

## Statement No. 3. Total Assets of Company.

Cash on hand.....	\$ 1 65
Lee county bonds, 8 per cent.....	150,000 00
Henry county do., do.....	100,000 00
Alt P. city do., do.....	50,000 00
Louisia county do., do.....	50,000 00
lands not needed for road.....	14,246 14
Installments due and unpaid.....	22,663 74
Bills receivable.....	4,075 00
Depot grounds at Keokuk.....	45,000 00
Freight house grounds at Keokuk.....	20,000 00
Construction, iron, ties, freights, right of way and incidentals.....	169,641 11
Rolling stock.....	34,620 00
Engineers' instruments.....	567 00
	\$680,814 24

Reliable pledges have been given to increase	
Mt. Pleasant subscription (city).....	50,000 00
Louisia county ".....	50,000 00
Private subscription, now being taken.....	125,000 00
Muscataine city and county.....	200,000 00
Add total first mortgage bonds.....	1,000,000 00

Total assets.....\$2,105,814 24

## BALTIMORE &amp; OHIO R. R.

At a stated meeting of the Directors of this road, held April 8, a special report was received from Mr. Bollman, Master of Road, in reply to a resolution of inquiry adopted at the last special meeting of the Board, relative to the second track, giving the information desired as follows:

"Eighty-three miles have been laid and charged to second track account, viz: 62 miles east and 21 miles west of Piedmont, in addition to which 7½ miles have been graded and ballasted, ready for the rails, and 6¾ miles graded, ready for the ballast, east of Piedmont.

"Before the grant of the five million loan we had 21 miles of second track between Baltimore and Piedmont, which, added to the amount laid since, 62 miles, equals 83—therefore, 83 deducted from 206 miles (the distance between Baltimore and Piedmont) we have a balance of 123 miles yet to be laid in order to have an entire second track between those points, which, estimated at \$12,000 per mile, would make \$1,476,000 the sum necessary for its completion.

"Amounts expended on account of second track, and applicable to the five million loan, have been as follows:

Nov. 14, 1854, (under the administration of Mr. Harrison).....	\$762,500 00
From 1st of March to the 1st of July, 1856.....	107,540 40
From 1st of July, 1856, to 1st of Jan., 1857.....	160,341 93
From 1st of Jan., 1857, to 1st of April, 1857.....	120,222 29

Total amount expended as above.....\$1,150,604 70

"The whole length of track, including main and second track, also sidings, equal to 539½ miles, as follows: 380 miles of main track, 106 miles of second track, and 53½ miles of sidings.

"There yet remains 4,652 lineal feet of tunnels to be arched and walled, which I esti-

mate at \$50 per foot; therefore, it will require \$232,600 to complete them."

The report of Mr. Atkinson, the Treasurer, was then presented, showing the financial condition of the road for the half year ending March 31st, the most important parts of which may be briefly summed up as follows:

Liabilities.....	\$27,588,769 52
Assets.....	27,588,769 52

In the table of assets is included the following items:

Outstanding dues.....	\$ 12,975 67
Machinery department—materials on hand.....	204,480 42
Road department.....	109,376 40
Cash in the hands of officers for disbursement.....	19,790 75
Bonds of the city of Baltimore.....	11,205 41
Uncollected revenue.....	353,612 22
Treasurer—balance in treasury after the payment of the interest due on the 1st of April proximo of \$61,102 50 to the city, and of \$91,714 33 upon the mortgage bonds of the company.....	124,814 69

The following statements of revenue and expenses of the main stem for the half year ending March 31st, is also embraced in the Treasurer's report:

Revenue.....	\$2,323,761 82
Expenses of transportation.....	\$574,742 95
Repairs of locomotives.....	284,805 33
" burden cars.....	131,661 14
" passenger cars.....	50,826 08
" stationary machinery.....	20,954 99
" railway.....	24,454 30
" bridges.....	25,111 64
" water stations.....	16,713 21
" depots.....	22,781 23
Watching bridges.....	3,674 00
Watching cuts.....	16,196 50
Watching tunnels.....	1,790 50
Pumping water.....	5,277 17
General expenses.....	20,690 22
Losses by accidents.....	14,147 23
	1,523,427 69

Showing the excess of revenue over working expenses to have been.....\$860,334 13

The Treasurer also submitted a statement of the connection of the road with the Central Ohio Railroad in reply to a resolution of inquiry, showing that company to be indebted to the Baltimore & Ohio Railroad in the sum of \$51,000, independent of the interest on the bonded debt.

PEORIA & HANNIBAL R. R.—At the meeting of the stockholders of the Peoria & Hannibal Railroad Company, held in Vermont on the 14th day of April, the following named persons were elected Directors for the ensuing year, to-wit:

N. B. Judd, of Chicago; Isaac Underhill, Peoria; Thompson Maple, Canton; N. Beedles, Lewistown; Wm. R. Johnson, Vermont; Lewis D. Erwin, Rushville; J. F. Hawkins, Hannibal, Mo.

Directors met and organized by electing N. B. Judd, President; Isaac Underhill, Vice President; A. M. Johnson, Secretary; John H. Piersol, Treasurer; S. Pulsifer, Assistant Treasurer.

Adjourned to meet at Peoria on the 10th of June.

The Directors in each county are authorized to procure additional subscription to stock, right of way, &c., preparatory to putting the road under contract as far as Rushville by the 10th of June.

Engineering force are at work in Fulton county on their way to Rushville, locating the road. Mr. Wheaton, Chief Engineer, expects to have the cars running to the Fulton county line, a distance of twenty miles, by the first of October. A vigorous effort on the part of our citizens will enable the company to bring the cars into Rushville by the spring or summer following, which must and will be made.

## POOLE &amp; HUNT'S MACHINE WORKS, BALTIMORE.

The Baltimore American says:—"A few days since we started, in company with one of the gentlemanly proprietors of the above named firm, for a visit to Woodbury, which is situated at a distance of about two and a half miles from the city. Passing along the route our mind was singularly struck with the wild and rugged scenery which greeted our vision. Lofly hills, high rocks, towering trees, running streams, pleasant valleys, wild and uncultivated foliage, all forming a perfect and harmonious picture of nature, and calculated to inspire the mind with the profoundest admiration of the Great Being who first called them into existence. Arriving at Woodbury, we were pleased to observe so many evidences of improvement manifested, not only with reference to the extensive establishment of Messrs. Poole & Hunt, but the entire neighborhood. Our time was exclusively occupied in examining the large and handsome workshops recently constructed. These front the west side of the Susquehanna Railroad, and, owing to their peculiar neatness of construction, present a very imposing appearance. Messrs. Poole & Hunt have appropriated, of their large tract of land, over two acres for the practical purposes of their business. This space of ground is already occupied with three workshops, built of blue free-stone. The buildings being detached, there is but little danger of the whole being destroyed in the event of one of them taking fire.

We first notice the machine shop, a part of which is for the present occupied for building cars. This edifice is 60 feet in width and 430 feet in length. The front, which is of handsome stone, tastefully pencilled, is adorned with heavy cornices and lighted by windows of semi-circular tops. The building is well supplied with light by spacious windows on both sides. We here observed a large number of cars in process of construction for the Baltimore & Ohio, Cumberland, and Pennsylvania Roads. In the rear portion of the building our attention was attracted by a large boring and turning machine; this is a new and valuable article, and is capable of turning 10 feet in diameter. We also observed a lathe 40 feet long, with a swing of 7 feet, besides a great variety of other valuable machinery, including all that is necessary for doing every description of wood work. The building is heated throughout by steam; not a spark of fire being used in any part of it, while every attention appears to have been paid in its construction which would in any way contribute to the comfort or convenience of the workmen. Over the building there is a loft extending its entire length; this is used as a storage house for patterns, with which it is well filled. Leaving the machine shop, we next enter the foundry where the castings are made. This building is 120 feet long by 80 feet wide and 25 feet high, clear; on one side there is a wing 120 feet long and 40 feet wide, and there is a similar one now in process of construction on the other side of the building. The whole, when finished, will present a very imposing appearance.

This foundry is provided with two cupolas capable of melting twenty tons of iron per day; three cranes, each capable of lifting ten tons; a pit thirty feet deep and twenty feet in diameter; and three large ovens for drying cores. There is a railway track; planed off perfectly true, connecting with the ovens, by which the work is taken out. We here noticed a large number of workmen engaged in



working car wheels and chilled tires for the Baltimore & Ohio Railroad. We also noticed a large number of castings for the dome of the new wings of the capitol, which the firm are now putting up. They are now casting 72 brackets to support 36 columns, which they have just finished. These columns are each 28 feet long, 2 feet 9 inches diameter, and weigh 6 tons each. We now enter the blacksmith shop. This is a substantial building 153 feet long by 53 feet wide; it will contain 22 forges and a furnace for heating large plates of iron. A portion of it is for the present used for the construction of boilers. We noticed, among others, a large boiler for a cotton mill in Virginia, and two for flour mills in South America. Situated between the two buildings is an engine house 50 feet by 30 feet; it has a chimney 100 feet high, with a flue 4 feet square at the base and 5 at the top, and is 10 feet square at the base outside. The house contains an engine which drives all the machinery of the establishment. In the yard there is a small frame building, divided off into partitions, for containing sand used in moulding. There is also in the yard a scale 30 feet long, capable of weighing 50 tons, and a crane for lifting heavy work; it is capable of raising 10 tons, and may be worked by two men.

In addition to the buildings already described, the erection of two others will soon be commenced; one of which will be a boiler shop of large dimensions, and the other, on a direct line with the machine shop, will be appropriated to offices, a school house to be used as a night school for apprentices, and a hall for public meetings. This will be a neatly constructed building eighty feet wide and sixty feet deep. Entrance to the whole is had by a spacious iron gateway, through which a track runs connecting with the main door, and adjoining which is a wall with iron railings. The whole affair forms the most capacious and handsomest establishment of the kind in the country, and is a lasting monument to the skill and enterprise of the projectors. There is a stream of pure water running at the side of the building, which serves all the purposes of the workshops, whether for washing, drinking or working. This is a desideratum possessed by but few establishments in the country.

Leaving the workshops, we now cross over to the east side of the road, where we spent some time in examining the various improvements going on. Messrs. Poole & Hunt have a tract of land amounting in all to 36 acres; a large portion of this has been laid off into building lots, where they propose erecting residences for the occupancy of their workmen. The material for constructing these buildings is taken from a large quarry owned by them and directly on the premises. We observed a number of workmen engaged in removing stone, some of which looked to be very fine. A road has been opened on a direct line with the workshops, running clear through to the Falls road, and connecting with the Reisterstown road, thus giving everybody easy access to the country wagons on their way to the city. This is a source of great convenience to the inhabitants of the place, Messrs. Poole & Hunt having extended the privilege of using the road to the public at large. Several streets and avenues have likewise been opened, around which will soon be placed a neat and substantial fence. The beauty of the road is much improved by an attractive bridge which has been recently placed over a stream that crosses it.

These improvements, which were commenced only four years since, have progressed with astonishing rapidity, and when the proprietors shall have realized all their plans and anticipations, they will have cause to congratulate themselves upon having reared up one of the most useful and beautiful manufacturing districts in the country. On our return home we found time to admire the beautiful situation of that portion of the grounds devoted to the residences of operatives in the neighborhood; about twenty of these stand upon a high and lofty hill, and commanding a view of the surrounding country. These buildings are of very neat appearance, and must be highly desirable as residences, so far as respects the health and convenience of workmen. Having reached the city, we made a short visit to the building occupied heretofore as their regular place of business.—Messrs. Poole & Hunt, we learn, are gradually concentrating their work at Woodbury, and after all their arrangements shall have been completed, their building on North street will be used only for storage and office rooms. This building, running from North to Holliday street, has a front of 160 feet, and at present employs a large number of blacksmiths and machinists. The number of hands employed in all is 250, and the amount of iron worked up annually is 2000 tons. This large business has been acquired during the short period of six years.

Messrs. Poole & Hunt have acquired a reputation as iron founders and machinists second to none in the country, as is fully evidenced by the success which has attended their efforts in business. They are constantly manufacturing and have always on hand stationary engines from six to eighty horse power, mill gearing, gas works, rail cars, car wheels, blowing machinery, hydraulic presses, sugar and saw mills, shafting, pulleys and hangers, steam boilers, water tanks, and various other kinds of machinery.

From the Student.

#### TURPENTINE MANUFACTURE.

Turpentine is the crude sap of pine trees. It varies somewhat in character, and freedom of flow, with the different varieties; the long leaved pine yielding it more freely than any other. There are very large forests of this tree in North and South Carolina, Georgia and Alabama; and the turpentine business is carried on in all these States; in North Carolina, much more largely than any of the others.

If we enter, in the winter, a part of a forest that is about to be converted into a "turpentine orchard," we come upon negroes engaged in making boxes, in which the sap is to be collected the following Spring. They continue at this work from November to March, or until, as the warm weather approaches, the sap flows freely, and they are needed to remove it from the boxes into barrels. These "boxes" are not made of boards, nailed together in a cubical form, as might be supposed; nor are they log troughs, such as, at the North, maple sap is collected in. They are cavities dug in the trunk of the tree itself. A long, narrow axe, made in Connecticut, especially for this purpose, is used for this wood pecking operation, and some skill is required to use it properly. We may see the green hands doing apprentice-work upon any stray oaks, or other non-turpentine trees, they can find in the low grounds.

The boxes are made from six inches to a

foot above the roots, and are shaped like a distended waistcoat pocket. The lower lip is horizontal; the upper, arched. The bottom of the box is about four inches below the lower lip, and eight or ten inches below the upper. On a tree of medium size, a box should be made to hold a quart. The less the axe approaches toward the centre of the tree, to obtain the proper capacity in the box the better, as the vitality of the tree is less endangered; but this is little thought about.

An expert hand will make a box in less than ten minutes; and seventy-five to a hundred,—according to the size and proximity of the trees, is considered a day's work.

The boxes being made, the bark, and a few of the outer rings of the wood of the tree, are cut off ("hacked") along the edge of the upper lip. From the this excoriation the sap begins to flow about the fifteenth of March, and gradually fills the boxes, from which it is taken by a spoon or ladle of a peculiar form, and collected into barrels.

The turpentine barrels are made by negro coopers; the staves split from pine logs, shaved and trimmed. They are hooped with split oak saplings, and are of the rudest construction possible; the staves being straight, and forming a simple cylinder, thirty inches long, and eighteen inches in diameter, headed up at both ends, with a square hole in one end, where the turpentine is poured in.

In from seven to ten days after the first hacking, the trees are again scarified. This is done with a hatchet, or with an instrument made for the purpose. A very slight chip, or shave, above the former, is all that is needed to be removed, the object being merely to expose a new surface of the cellular tissue—the flow from the former being clogged by congelations of the sap.

These hackings being made three or four times a month, the excoriation is constantly advancing higher up the trunk. The slighter the cut, the less the tree is injured; and the slower the advance, the longer and the more conveniently can the process be carried on: nevertheless, in ninety-nine "orchards" out of a hundred, you will see that the chip has always been much broader and deeper than it needed to have been. If the dipping has commenced when you visit the orchard, you will notice that the collected turpentine has much rubbish—chips and leaves—in it, considerably injuring its value. The greater part of this might have been avoided, by having the negroes clear out the boxes in which it had fallen in the winter; but they seldom take this trouble.

In some orchards you will see that many trees have been killed by fire. The wire grass, which grew among the trees the previous year, is frequently set on fire either accidentally or purposely, when dead and dry in the Spring. It burns slowly, and with little flame, and the living trees; the bark of which is not very inflammable, are seldom injured. But when a tree has been boxed and the chips lie about it, these take fire, and burn with more flame, so that frequently the turpentine in the box, and on the wood above it, also takes fire, and burns with such intensity as to kill the tree.

By the middle of March, the turpentine is flowing abundantly, and the negroes must be employed in hacking, as each tree requires to be freshly scarified once in a week or ten days. There are two ways of arranging the labor for this purpose used by the larger proprietors. In one, all the negroes employed



are divided into two classes—"hackers," and "dippers." The hackers are wholly employed in chipping the trees. A task of a certain number of trees is given to each, which he is required to go over, hacking each tree once in seven or eight days. The dippers are constantly employed in emptying the boxes as the fill with turpentine. The other way, and this is most common, is to give each hand a task of trees, each of which he is required to hack and dip steadily. Twenty-five hundred trees give a man five days' employment hacking, and one day dipping, in a week.

From one to four boxes are made in each tree, according to its size; a few inches of bark being left between them. The greater number of trees from which turpentine is now obtained, are from a foot to eighteen inches in diameter and have three boxes each. The hacking is carried on year after year, until, in the oldest orchards, it is extended twelve or fifteen feet, and ladders have to be used to carry it further up the trunks of the trees.

The turpentine flows from the most recent hack, down over the previously scarified wood of the tree, toward the box; a considerable proportion of it congealing by the way, and remaining attached to the wood. From this adhering portion, a part of the spirits, or oil, has evaporated in the process of drying; it is, therefore of less value than that which is taken in a more liquid condition from the box. It is occasionally,—perhaps but once a year,—scraped off and barreled by itself. It is therefore, known in market as "scrape;" while that which is dipped from the box, and which is of considerably higher value, is termed "dip." The flow of the first having but a small surface of wood to traverse, and being, therefore less exposed to evaporation than the flow of later years, is of higher order than the ordinary dip. It is called "virgin dip."

**OIL OF TURPENTINE.**—A very large quantity of turpentine is shipped in barrels to Northern ports, where it is distilled; a large part, also, is distilled at home. The stills used for making spirits, or oil of turpentine from the crude gum, are of copper, not materially different in form from common ardent-spirit stills, and have a capacity of from five to twenty barrels, an average size being, perhaps, ten barrels.

The forest-distilleries are usually placed in a ravine, or valley, where water can be brought to them in troughs, so as to flow, at an elevation of fifteen feet from the ground, into the condensing tank. At a point at which the ground will decline from it in one direction, the still is set in a brick furnace. A floor or scaffold, is erected on a level with the bottom of the still-head, and a roof covers all. The still-head is taken off, and barrels of turpentine, full of rubbish as it is collected by the negroes, are emptied in. When the still is full, or nearly so, the still-head is put on, and the joint made tight with clay; fire is made, and soon a small, transparent stream of spirits begins to flow from the mouth of the worm, and is caught directly in the barrel in which it finally comes to market.

To prevent the spirits from soaking through the wood, and evaporating, the barrels are all washed on the inside with glue. They are made as carefully as possible, and are often brought from the North, and sold at three or four dollars a piece. Notwithstanding this precaution, the waste from leakage and evaporation is very great, owing to the exceedingly subtle nature of the fluid.

**RESIN.**—When all the spirits, which can

be profitably extracted, are thus drawn off, the fire is raked out of the furnace, a spigot is drawn from a spout at the bottom of the still, and the residuum flows out—a dark, thick fluid, appearing as it runs, like molasses. This residuum is resin, or the resin of commerce. There is not a sufficient demand for resin, except of the first qualities, to make it worth transporting from the inland distilleries; it is usually, therefore, conducted off to a little distance in a wooden trough, and allowed to flow from it to waste upon the ground. When it is intended to save the resin, it is drawn off into a vat of water, which separates the chips, and other rubbish which were contained in the gum, and it is then barreled for market.

**TAR.**—Tar is an extract from the pine wood obtained by charring it. It is made wholly from the heart, or "light wood," of the long-leaved pine, which is split into billets, of a size convenient for handling, and arranging in the tar-kiln. Trees, which have been used up in the turpentine business, are the best to use in making tar. The billets are piled in a conical heap, which is covered with turf, much as coal pits are made at the North. The kiln is usually built upon a hillock, with trenches underneath having mouths a little below it, on the hill-side. The proper burning of the kiln to produce the most tar is an art to be learned by practice. It is made to burn very slowly, to gradually roast out the juices of the pine, so that they will run down, collect in the trench, and flow out at its mouth, where, in the commingled condition known as tar, they are ladled into barrels.

This is an exceedingly slovenly process, the tar being mixed with sand, and collecting other impurities as it flows through the kiln, and searches a way out on, and through the ground.

It is for this reason that it is prepared with more care, so as to be free from the admixture of sand, that the tar of northern Europe always stands at a higher value, and competes with the Carolina tar, even in our own ports. A new patent process of roasting the pine in iron ovens, the fire not being in contact with it, has lately been introduced, and gives good promise of removing this reproach. The tar is said to be of much superior quality, and to be obtained more expeditiously and economically than by the old method.

**PITCH.**—Pitch is a concentration of tar obtained by boiling it.

**THE RAILROADS OF MAINE.**—The past year has not been favorable to business on the railways of Maine. We give the receipts of the leading lines for the three past years:

	Length.	1854.	1855.	1856.
A. & S. L. ....	149	\$170,647	\$552,488	\$565,168
And. & Ken. ....	55	178,353	196,342	212,998
Androscooggin. ....	20	29,296	no return.	23,805
Bangor & Oldtown. ....	13	44,889	46,170	25,698
Calais & Bangor. ....	6	31,640	27,172	32,380
Ken. & Portland. ....	72½	207,357	228,064	223,290
Pen. & Kennebec. ....	65			112,702
Portland, S. & P. ....	51	272,300	277,502	264,180

There is at this time in operation in Maine 508 miles of railroad, costing about \$17,500,000, showing a gross income of about \$1,500,000, but the returns are so incomplete and defective that it is impossible to give anything like an adequate idea of their actual condition or working expenses. There has been a handsome increase in business on the A. & K. R. R., and a small one on the A. & S. L. R. R., in 1856.

## GOOD ADVICE.

A correspondent of the *Indianapolis Journal* is responsible for the following good advice to the managers of railroads, which we give our readers, believing that if it does not instruct it will at least amuse them, and let them know how people talk about them. Superintendents, be sure to read it:

## RAILROADS.

*Mr. Editor:* Railroads are not managed right for the good of the public. They are public institutions, chartered by the Legislature, without which they could not exist. They ought to be reformed. Suppose those which run three trains a day would run two only, is it not plain that they could carry the passengers at two-thirds what they now charge? If those which run two trains would run one only, they might fall one-half. But the particular point for reform is in freights. These roads forget that they depend mainly on the farmer for their freight, and that every cent they charge on flour, wheat, corn, hogs, pork, &c., is that much out of the hard earnings of the farmers—the very men who built and sustain the roads. It is not fair that while the farmers are to be cut down the full amounts of the freights charged, in the prices of their produce, a few officers, clerks, directors and stockholders should be pampered with heavy salaries and large profits. It is calculated to injure the value of farmers. At one time it appeared as if the roads, by a healthy competition with each other, would bring down freights, (especially through freights from competing points,) to fair rates. But it has not been done, and that hope must now be abandoned. There is a determination to enjoy the monopoly, to keep freights high. The next Legislature should compel the roads to reduce their rates one-third, and that would cause an increase of business and profits. Persons talk about the wear and tear of the road, but it is plain that iron bars and wheels will not wear out. Free passes are too exclusive, and should be liberalized. The manners of the understrappers on these roads ought to be improved. If more competing lines were built, then roads would feel like really wanting the business, and then they would be more liberal—which would be for their good. I will reserve specifications of reform for a future time.

Freights should be lower and free passes liberalized! Very good advice—very.

**AN AUSTRALIAN COPPER MINE.**—The Burra Burra Copper Mine in Australia, cost its shareholders for land and total working expenses up to the dividend paying point \$61,150; up to the present time only seven acres of the property have been worked, and from the proceeds of this tract \$2,156,875 have been paid in dividends, and the mine is now going on at the rate of \$433,270 net profit half yearly.—Verily, we must do something extra on this side of the world if we expect to beat this.

**MORRIS CANAL CO.**—The Morris Canal Co. promises most favorably, considering the many tribulations through which it has passed. It stands thus:

Six per cent. mortgage debt, due 1875. ....	\$ 500,000
Ten per cent. preferred issue. ....	784,000
Do. to be issued. ....	286,000
Common stock. ....	1,025,000
	\$3,289,000
Earnings last year. ....	\$313,000
Interest on bonds. ....	\$ 20,000
“ “ preferred. ....	76,400
Expenses of canal. ....	106,600
	213,000

Leaving, earned for common stock last year...\$100,000



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r.	When Payable.	When Payable.	When Due.	Description of Bond.	Quot of Bonds.	Name of Company.	Quot of Stock.	Quot of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al xndria, Lon & Hmp'sr	173		5,000,000.00				
398,800	6			1862-3	2d	.....	Androsco'g'n & Keunebec	54.55		1,400,000.00		209,475.40	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	80.5		1,000,000.00	199,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646	6			now	"	.....	B'g'r, Old T. & Milford...	12.5		135,000.00	52,646.25	39,104.40	8,671.61	15,000 in '53
500,000	7			1860	"	.....	Boston & Worcester...	44 5-8		4,500,000.00	500,000.00	1,102,781.90	437,062.03	180000 4.6m
500,000	7		N. Y.	1866	1st mortgage.	.....	Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000	7			1857-9-62	Domestic.	.....	" " "							
200,000	7			1864	4th mortgage.	.....	Central Ohio...	20						
577,187	6			1872	1st mortgage.	.....	Champl'n & St. Law'r'nce	43		1,872,800.00	1,001,087.00	162,200.00	77,700.00	10 per ct.
192,204	7			1874	2d	.....	Ch'p'te & South Carolina...	110		17,000,000.00	380,000.00	291,219.86	47 per ct.	\$72,200
380,000	7			1861-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy...	128		3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,440,000	6-7-8		N. Y.	1868-9	2d	.....	" " "							
1,700,000	8			1868-76	Convertible.	.....	Chicago, Fulton & Iowa...	5	132	1,761,149.16	2,241,500.00	221,491.96		
374,000					3d	.....	Cin. Will'ng'n & Zanesville	25						
1,500,000					Income.	.....	" " "							
532,000	6				Convertible.	.....	Cleveland Col. & Cin.	103 1/2	139	4,741,220		1,329,754	700,204	6 per cent.
104,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning...	85		1,500,000.00				
305,500	7			1861	2d	.....	Cumberland Valley...	52		1,218,300.00		160,511.56	81,101.56	\$33,250.24
540,000	6			1873	1st mortgage.	.....	Dayton & Cin. short line.	52		1,000,000.00	1,000,000.00			
43,000	6			1857-8-9	2d	.....	Eastern Railroad...	93-10		3,345,900.00		665,572.79	288,000.78	\$234,133
400,000	7				3d	.....	East Tcn. & Virginia...	130		625,450.00		30,897.20	19,092.30	
200,000	10			1869	1st mortgage.	.....	Essex Railroad...	20		700,000.00				
100,000	7			1861	1st	.....	Evansville & Crawf'd'vle	109		2,228,657.00		243,970.42	136,061.90	\$133,221.45
740,000	10			1864	2d	.....	The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,837.81	3 per cent.
88,000	7				1st mortgage.	.....	Fox River Valley...	33		800,000.00				
400,000	7					.....	Fair Haven Branch...	15		300,000.00		50,321.33	14,822.45	\$166,240.00
200,000	10					.....	Georgia, RR & Banking Co.	233		4,156,000.00		1,068,212.55	357,689.42	\$66,340.00
100,000	6				1st mortgage.	.....	G't Falls & Conway R.R.	90				27,376.69	14,207.07	
100,000	6				1st	.....	G't West'n R.R. of Can.	281 1/2		4,101,550.00		2,068,836.00		8 pr. ct.
300,000	6 1-9			1858	1st	.....	Housatonic Railroad...	74		2,000,000.00		329,196.50	176,529.95	
4,000,000	7			1869-70	2d	.....	Hudson River...	24 1/2	144	4,000,000.00		1,924,382.44	718,037.40	
2,000,000	7			1860	3d mortgage.	.....	" " "	144		4,000,000.00				
1,812,000	7			1875	1st	.....	Illinois Central R.R.	130	704	18,453,376.00		1,476,035.27	1031,489.68	7 pr. ct.
12,885,000	7			1876	6 1/2%	.....	" " "	704		3,558,376.00				3 pr. ct.
4,115,000	7			1860	99 3/4%	.....	Indiana Central...	72 1/2				354,871.00		
3,000,000	7			1862	80%	.....	Iron R.R.	13		123,700.00				
600,000	7				2d	.....	Kentucky Cen. 2d Div.			719,500.00				
700,000	7				1st	.....	Knoxville & Kentucky...							
50,000	7				2d	.....	Laurens (S. C.) R.R.	32		166,000.00		23,233.59	14,233.59	
700,000	7				1st	.....	Louisville & Nashville...	184						
218,000	7				2d	.....	Lowell & Lawrence...	12 3/5		300,000.00		50,224.71	14,149.13	8 pr. ct.
1,000,000	7			1866	1st	.....	Mad River & Lake Erie...			2,697,090.00		587,236.57		10 pr. ct.
1,000,000	6			1875	2d	.....	" " "			2,697,090.00			162,277.50	
2,000,000	7				1st	.....	Manchester & Lawrence.	26		1,000,000.00				\$24,000
2,500,000	7			1868	1st	.....	Marietta & Cincinnati...							
2,000,000	7			1874	2d	.....	" " "							
60,000	7 and 8			1867	1st	.....	Mexican Gulf R.R.	27						
420,000	8				1st mortgage.	.....	Milwaukee & Horicon...	30						
327,000	8			1881	1st	.....	Mineral Point R.R.	32						
320,000	8			1 68	2d	.....	" " "	32						
6,000,000	6			1884	1st	.....	Mobile & Ohio...	497		10,000,000.00		253,498.95	162,812.24	
500,000	7			1869	1st mortgage.	.....	Nashua & Lowell R.R.	15		600,000.00		194,752.42	55,501.74	7 pr. ct.
2,356,000	7					.....	New Haven & North'm'n	55		922,500.00				2 pr. ct. 6m
8,812,600	6	May & Nov.	N. York	1864	Con. till 1859.	89	New York Central...	87 1/2	555	23,067,400	14,763,802	7,707,348	3,609,481	3 pr. ct. 6m
3,000,000	7	June & Dec.	N. York	1873	1st mortgage.	74	" " "							
976,000	7			1873	2d	.....	N. Y. & Harlem R.R.	133		5,717,100.00		1,040,593.26	64,678.71	\$37,699.30
411,700	6			1861	1st	.....	" " "							
500,000	7			1863	1st	.....	N. Y., Prov. & Boston...	50		1,520,000.00		245,713.00	51,544.40	
300,000	6				2d	.....	N. Lon. & William'uta & Pal.	66		1,700,000.00		120,571.50		\$25,000
						.....	" " "							
1,500,000	6					.....	Pontchartrain R.R.	5		500,000.00				
1,000,000	6			1873	1st mortgage.	.....	N. O., Opelousa & Gr. West.			6,600,000.00		116,795.00	366,118.20	7 pr. ct.
2,000,000	6			1873	2d	.....	N. Y. & New Haven...	62 1/2		3,000,000.00		1,007,666.48		
1,500,000	7			1885	3d	.....	North Western Va. R.R.	102 1/2						7 pr. ct.
3,000,000	7			1859	1st mortgage.	.....	" " "							
419,200	5			1877	1st mortgage.	.....	Northern (N. Y.) R.R.	118		2,000,000.00		600,000.00		
221,500	6			1860	1st mortgage.	.....	North Missouri R.R.	19 1/2				25,116.74	88,458.56	2 1/2 pr. ct.
						.....	Norwich & Worcester R.R.	60		2,111,500.00		304,236.33		
400,000	6					.....	Ogd'sh'g, Clay't'n & Rome							
1,200,000	6			1866	1st mortgage.	.....	Ontario, Simcoe & Huron	94				28,960.10	137,875.43	5 pr. ct.
300,000	7			1875	2d mortgage.	.....	Orange & Alexandria R.R.	88 3/4		2,957,500.00		276,539.02		
300,000	8			1863	1st mortgage.	.....	" " "							
350,000	6			1873	1st	.....	Peoria & Bureau Val. R.R.	47		1,500,000.00				6 pr. ct.
500,000	7			1861	1st mortgage.	.....	Philadelphia & Trenton...	28 1/5		1,000,000.00				
1,200,000	6			1864 to 1874	1st	.....	Potomac & Concord...	47						
				20 years.	1st mortgage.	.....	Potsdam & Watertown...	76		2,000,000.00				
						.....	Rutland & Washington...	62 1/2		950,000.00		68,525.42		
						.....	St. Louis & Iron Monn. R.R.	86		6,000,000.00				
						.....	Salem & St. Louis R.R.	168 1/2		400,000.00				
						.....	Snd'sky, Mansf'd & Newk	116					19,050.04	
						.....	Sullivan Railroad...	96		500,000.00		75,246.06		
						.....	Tennessee & Alabama...	145				39,586.44		11m. 12 pr. ct.
				1861	1st mortgage.	.....	Terre Haute & Richmond	73		1,294,450.00				
				1840	2d	.....	Toledo, Wabash & Western	212		1,000,000.00				
				1875	3d	.....	Troy & Boston...							
						.....	" " "							
						.....	Vicksburg & Jackson...	76					165,076.04	2 pr. ct.
						.....	Virginia & Tennessee...	215		3,000,000.00		322,048.60		
						.....	Westchester (Pa.) R.R.	31		165,000.00				
						.....	Wilmington & Manchester	171						
						.....	" " "							
						.....	Winchester & Potomac...	32						
						.....	Worcester & Nashua...	45 69						



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

April 9, 1857		
Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858, ..	"	"
Cin. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	65	68
Erie, 3d Mortgage, 1883, ..	64½	85½
" Sinking Fund, ..	83	85
" conv. 1862, ..	73	78
Grand Trunk (Canada) Debenture, ..	83	90
Great Western " conv., ..	123	128
" " non-conv., ..	107	109
Illinois Central, 1st Mort., 7½, ..	89	91
" " with option 70 per cent. shares till Jan. 1858, ..	106	108
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	86	88
Little Miami 1st Mort. not conv. 6½, ..	"	"
Marietta and Cincinnati, 1st Mort., ..	"	"
Michigan Central, conv., 8½, 1860, ..	90	92
do do do 1869, ..	91	93
N. York Central. No Mort. Not conv., 6½, ..	82	83
" conv., 7½, ..	93½	91½
Ohio and Mississippi, 1st Mort., ..	"	"
Ohio and Pennsylvania, Income 1872, ..	68	70
Panama. No mort. conv. 1866, ..	"	"
Pennsylvania, 1st Mort., conv., ..	88	90
" " Sterling, 3d Mort., ..	91	93
Stenberville and Ind. 2d Mort., ..	"	"

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent.

## CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending April 29, 1857.

## BONDS.

\$2,000 Cin., Wil. & Zanesville R. R. Co. 7 per cent. 2d mort. Bonds, ..	25
1,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. Bonds, ..	60
1,000 Marietta & Cincinnati R. R. Co. 7 per cent. Domestic Bonds, ..	40
6,000 Indianapolis & Cincinnati R. R. Co. 7 per cent. 2d Mortgage Bonds, ..	0, and int.
3,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	82½
4,000 Town of Perryburg, Wood county, Ohio, 7 per cent. Bonds, ..	48
1,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds, ..	55
2,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 2d mort. Bonds, May coupon off., ..	82
5,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds, ..	67½
1,200 Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds of 1860, 1861 and 1866, ..	99
930 Ohio & Mississippi R. R. Co. Serip. 33	
650 Little Miami R. R. Co. Dividend Serip. of Nov., 1856, ..	81

## STOCKS.

200 Shares Cincinnati & Chicago, ..	2½ aud int.
118 " " Ohio and Miss., ..	12
50 " " Columbus & Xenia, ..	94
35 " " Dayton & Western, ..	20
20 " " Cin. Ham. & Dayton, ..	69
100 " " Indianap. and Cin., ..	64
64 " " Bellefontaine & Indiana, ..	25 1/2
25 " " Junction (Ind.), ..	8½
80 " " Little Miami, ..	95
150 " " do do b20ds, ..	96
10 " " do do cash, ..	96
14 " " Cov. & Lexington, ..	18
200 " " Cin., Wil. and Zanesville, ..	5
25 " " Southern Pacific, ..	\$3 25 for \$5 paid.
120 " " Little Miami, ..	86
40 " " do do, ..	96

## MONETARY AND COMMERCIAL.

Since our last we note but little improvement in the markets for money. Discounts are not readily attainable in the regular houses, owing more to scarcity of currency than to the great amount that is presenting itself. This will continue so long as exchange rates at present figures. Eastern banks cannot afford to send their currency to us, and western banks dare not put theirs into circulation. As the demand for eastern exchange falls off we may look for improvement; but not much can be expected before.

Eastern exchange is quoted at ½ and ¾ @ 1 per cent.

From the eastern cities we notice an improved tone

in the money articles. Money is growing easier, and the demand is said to be hardly equal to the supply. Outside rates are quoted at 8½ @ 9 per cent. The exports of specie are still large.

The President of the Chicago, St. Paul & Fond du Lac R. R. contradicts the report that this company had suffered any loss from the temporary suspension of Dodge, Bacon & Co., of London.

Hewson & Holmes, in their circular, say:

Since our last weekly issue we notice a gradual improvement in the money market; so much so that there is no difficulty in negotiating first class paper at from 10 to 12 per cent. per annum; indeed the amount offered is small in comparison with what could be sold were it to be had.

In Stocks we also notice an advance in favorite roads. Little Miami shares have been sold at 96, which is 1 per cent. higher than last week; Columbus & Xenia shows the same difference, while in Hamilton & Dayton and Indianapolis & Cincinnati, and the fancies, there has been no change. During the week a sale was made of 150 shares Ohio Life Ins. & Trust Co. Bank Stock at 97½, which is about the same as it rules in New York, taking into account the difference in exchange. We know of several orders for Kentucky bank stocks at full rates, but holders are unwilling to sell, anticipating a division of the surplus accumulated the last few years. Our opinion, based upon pretty good authority, is that stockholders will be disappointed, and be kept waiting longer than will be convenient, provided they want to realize, as no such division has been seriously thought of for the present.

The supply of Exchange is light in comparison to the demand. Eastern ¾ and 1, buying and selling.

## NEW YORK STOCK SALES, April 27, 1857.

\$10,000 Virginia 6's, ..	91½
9,000 Missouri State 6's, ..	83½
1,000 N. Y. Central 6's, ..	89
6,500 Ill. Cent. R. R. Bonds, ..	99½
2,000 LaCrosse & Milwaukee, ..	86½
1,000 L. Erie & M. R. 1st Mortgage, ..	59
50 Shares N. Y. Central R. R., ..	87½
5 " " Ohio Life & Trust Co. stock, ..	96½
60 " " Milwaukee & La Crosse, ..	78
20 " " N. H. & Hart. R. R., ..	118
200 " " Illinois Central R. R., ..	132
10 " " Cleveland & Pittsburg, ..	51½
5 " " Cleve. C. & Cin., ..	103½
152 " " Gatea & Chicago, ..	101½
200 " " Cleveland & Toledo, ..	66
150 " " Chicago & Rock Island R. R., ..	97
100 " " Mil. & Miss., ..	69½
2180 " " Erie R. R. stock, ..	43½
50 " " Harlem, ..	14
170 " " Mich. So. & No. Ind., ..	63½

INDIANAPOLIS & CINCINNATI R. R.—We understand that an important arrangement has been consummated between this company and the Lafayette, Wabash Valley and Illinois Central Railroads, for the shipment of freights direct, without change of cars, from Cincinnati to Galena and Dunleith. This arrangement is one of great importance, as it will materially reduce the time of transit between these points, and give Cincinnati just so much advantage over her present facilities. It will also add to the business of the roads.

We are glad to see such provisions made to foster this species of business, and believe it to be the true interest of railroads to foster and encourage freights.

## IRON BRIDGE.

The fall of the Genesee Suspension Bridge but adds one more evidence to the instability of this class of bridge structures. We acknowledge that we have no faith in the principle on which they are made, it being contrary to true mechanics. Common sense would dictate that the arch upturned, with an equal amount of metal, has not the strength of the arch resting on its feet. In one case we have merely the tenacity of the particles, while in the other we have the building up of particle on top of particle, and no weight can bear it down. We would like to see the Mosely Tubular Wrought Iron Arch Bridge tested on a large scale. Why do not some of those corporations try it? It will be recollected that by the test made on the model some year or two ago, both in this city and at the East, that a little fragile structure, weighing but eighteen or twenty pound, bore up under a load of lead piled up between two and three feet high, and weighing over 5000 pounds, while this fabric tumbles down with but a foot of snow.

THE NATIONAL WAGON ROAD.—W. M. McGraw Esq., one of the Superintendents of the National Wagon Road to California, late of Maryland, will start from Independence, Mo., about the 20th of May. Mr. Lander, of Massachusetts, a well-known explorer, and a brother of Chief Justice Lander, of Washington Territory, is the engineer of this expedition, and Dr. Cooper, of New York, the surgeon. The first named gentleman is a daring pioneer of the South and West, and the two last were in General Steven's celebrated Northern expedition. With such officers, backed by an army of hale and hearty workmen, the road must progress rapidly through the wild and rugged forests to the golden regions of California, and no doubt many honest men will, through this great movement on the part of our country, cut and work their way to a fortune in the gold diggings. An immense force of laboring men will be required to complete this great undertaking.

GREAT WESTERN R. R. ILL.—We have seen as yet no statement from the President of this road, in relation to the failure of this Company to meet the interest due April first.

## TO PRINTERS.

Large Cylinder Hoe Press  
FOR SALE.

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once. Address WRIGHTSON & CO., 167 Walnut street, Cin'ti, Ohio. N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap. ap8-1m W. & CO.

## FOR SALE.

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address WRIGHTSON & CO., 167 Walnut street, Cin'ti, Ohio. ap8-1m



**LACROSSE AND MILWAUKEE R. R.**

We find the following interesting details of this road in the *Milwaukee Sentinel*:

This road has at its eastern or south-eastern end, three lines, or divisions—one called the Eastern Division, extending from Milwaukee, by way of Horicon, to Portage City, 95 miles; another, called the Watertown Division, from the junction of the Milwaukee & Mississippi R. R., (14 miles from Milwaukee), via Watertown and Columbus, to Portage City, 82 miles; the third called the Portage Division, from Madison to Portage City, 40 miles. These three Divisions, embracing some 217 miles of road, all concentrate at or near Portage City, from which point the Western Division extends to La Crosse, a distance of 100 miles. The North Western Division will extend from Portage City, or from some point west of there on the Western Division to the St. Croix river or Lake. The route of the North Western Division is not yet determined upon, but will be fixed at as early a day as the surveys, which are now being made, will enable the Directors to decide upon the most feasible route; but its length, probably, will not vary much from 220 miles. The whole length of road, when all the divisions are completed, will therefore be about 535 miles—the longest road in the United States owned by one Company, except the Illinois Central and the N. Y. Central.

Two years ago the Company had but eight miles of track laid, one locomotive and 20 platform cars, and its unexpended means, after deducting its floating debt, was less than \$250,000. It now has the entire Eastern Division of 95 miles in successful and profitable operation, and 50 miles of the Watertown Division, making between  $\frac{1}{2}$  and  $\frac{3}{4}$  of its entire chain of roads already finished. It has also in use 28 locomotives, 22 passenger and baggage cars, 391 freight cars and 50 gravel cars.

The La Crosse & Milwaukee R. R. Company will, when their several divisions are completed have one entire road, with the North Western branch terminating on the St. Croix River, and there connecting with the North Western Minnesota R. R. already referred to, which traverses the route surveyed by Governor Stevens for the Northern Pacific R. R., as far as the Sioux Wood river, a distance of about 180 miles, and also with the branch to the Red River of the North, which will extend an additional distance of about 230 miles, giving a total of railroad in Minnesota connecting with the North Western branch of more than 400 miles.

The Western branch terminates at La Crosse on the Mississippi river. An independent company has been incorporated to construct a railroad from a point opposite Winona, to intersect the La C. & M. R. R., in the valley of the La Crosse river. Whenever that shall be constructed, the Western branch will practically have two termini on the Mississippi river, one at La Crosse the other opposite Winona, each of which will be in the line of the most direct connection with another Land Grant Road in the southern part of Minnesota, extending from Winona via St. Peters to the Big Sioux river, (the western boundary of Minnesota,) with a branch from La Crescent (opposite La Crosse) up the valley of Root river. These two roads, when they leave the Mississippi, are about 30 miles apart, and gradually converge until they connect at some point not more than 80 miles from La Crosse, from thence they form a common line to the western boundary of the State, a further distance of about 175 miles, following the most direct route to intersect in about lat. 45°, in the valley of the Sweet Water, the route surveyed by Fremont and Staubsbury for a Pacific Railroad, by way of the South Pass. Thus making a railroad connection in Minnesota with the Western Division of about 330 miles in length.

This system of roads, embracing 535 miles in Wisconsin, and over 700 miles in Minnesota, altogether over 1250 miles of railroad, may be expected to be completed in a very short time.

[From the Rochester Union 21st.]

**FALL OF THE GENESEE SUSPENSION BRIDGE.**

The much talked of structure at the Lower Falls, known as Genesee Suspension Bridge, fell into the river this morning about 3 o'clock with a tremendous crash, leaving scarce a vestige behind to mark spot the where it stood. The immediate cause of the disaster was the immense accumulation of dense snow during yesterday and last night. The body of snow was perhaps one foot, in depth and each square foot no doubt weighed thirty pounds.

Careful estimates, made from reliable data, fix the total weight of snow on the bridge when it fell at not less than one hundred and fifty tons. With such an immense load it is indeed strange that it stood as long as it did. As no person saw it fall, we can only by inference from the manner in which the ruins lie conclude where it first failed.

The rods to which the cables were attached in the north abutment on the east side, and the south abutment on the west side, drew out of the masonry. The main cables are still fast at one end. The other ends are in the river, two hundred feet below. It is presumed that the bridge was so borne down by the weight between the towers that the tops of the east iron towers were drawn over and broken.

When they fell the cables were drawn out of the anchorage by the sudden jerk. The broken towers lay in heaps of ruins. The floors between the towers fell into the river and was swept away by the water. Those sections of floor between the towers and the anchors lie on the sloping banks. The whole scene now presents an interesting and profitable spectacle for the contemplation of Aldermen, engineers, mechanics, and tax-payers generally.

The defects in the structure are apparent in more ways than one. The towers were a sham, but possibly might have withstood the test to which they were subjected, had the pressure been vertical, as it would have been, had the cables been laid so as to render, and not so as to draw the tops of the towers towards the river when the weight directly over the stream was greatly increased, as it was last night.

The towers were made in an inferior manner, and were not as strong as they appeared to be. We notice that one of the columns broke at a point where it had been patched by a piece of boiler iron, put on the inside and rivetted to the casting. This piece of patchwork was made in consequence of a crack around the column and to save re-casting. How many more of these columns were thus patched we cannot say.

The history of this Suspension Bridge might be written at length, but we can only give the date of its birth to day and its cost. The details of its destruction are given above. The bridge crossed the river at the Lower Falls, some two hundred feet above the water. It was upwards of seven hundred feet long and about twenty feet wide.

The towers which supported the cables were made of hollow iron columns about a foot in diameter connected by diagonal braces of iron.—The towers were one hundred and five

feet high, in the form of a pyramid, some sixteen feet square at the base and six feet at the summit.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

**BUSH & LOBDELL,**

Wilmington - - - - - Delaware.

MANUFACTURERS OF

**CHILLED WHEELS**

AND

**TIRES,**

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

**CELEBRATED WHEELS,**

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

**WHEELS FITTED**

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

**Most Reasonable Terms.**

ap23

**W. G. HYNDMAN'S****Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

G. W. MORRILL.

G. B. BOWERS.

**MORRILL & BOWERS,**

(Successors to and members of the late firm of C. W. A. SON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

**Railroad Cars of Every Description.**

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Watson, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases. ap16



# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE

### RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press on 1

MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you tell us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

## Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C.

ap12

## Thorough Bred Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

## SHORT HORN BULL, "TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

T. WRIGHTSON.

## ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,  
No. 112 MAIN STREET,

East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

## Union Works, Baltimore.

POOLE & HUNT,  
Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap:3

## SILVER, GOLD, LEAD, And Other Minerals.

ON THE PROPERTY OF THE

Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the Sonora Exploring and Mining Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

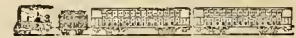
The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Agt for the Company,

Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

## Norris' Locomotive Works.



PHILADELPHIA.

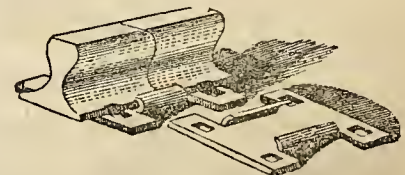
ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. j3:27.

RICHARD NORRIS & SON.

## RAILROAD SPIKES.



WROUGHT IRON

## Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT AND CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch.

J. HOPKINSON SMITH

No. 25, South Charles

Please direct the name in full.

Baltimore August 31-7



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12:30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6:30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton

At A Steamers leave Racine for Chicago every evening at 10:30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President, aug14  
ROBERT HARRIS, Ass't Sup't.

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

### MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

### BANK NOTE

### ENGRAVERS AND PRINTERS.

Also, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of

GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
a) r2 Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

### VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [jan]-[ry] Agent.

## PRATT & FREEMAN.

### PHILADELPHIA

## Railway Supply Agency

No. 22 I-2 Walnut, and No. 11 Granite St., PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.,

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps.

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lamps,

Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS.

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domcs, Escape Pipes, Cylinder Heads and Jackets

Steam and Water Gauges, Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws

Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chins, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE.

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

ORDERS SOLICITED AND PROMPTLY FILLED. oc23-1y

## E. MENDENHALL,

## MAP, BOOK & PRINT SELLER,

Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES

### DRAWING INSTRUMENTS, &c.

Publisher of the

### Railway Map of the Western States,

In Sheet or in Pocket Case;

THE LARGE SECTIONAL AND RAILWAY MAP OF OHIO THE LARGE MAPS OF CINCINNATI, AND HAMILTON CO.

Ohio, and the TOWNSHIP MAPS OF INDIANA AND IOWA MAPS OF EVERY DESCRIPTION. mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, etc., by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

## Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the mild and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOT E METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

64 Broadway, N. Y.

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for

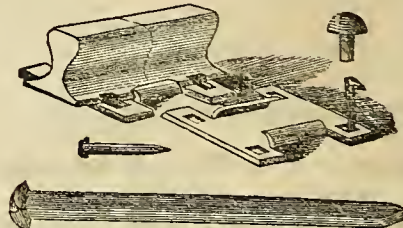
Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. nat1-1y

## GREAT WESTERN

## Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

feb 28

CORBY, GOSSIN & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26 1/2 hours, and to Washington is but 27 1/2 hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

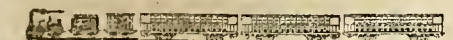
WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

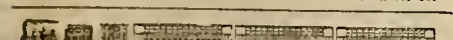
Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

©1893-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING.

PITTSBURGH.

DUNKIRK.

BUFFALO.

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	4 1/2 "
To Dunkirk in.....	13 1/2 "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

Jyl17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan2

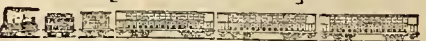
1856.

1857.

Spring Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

## NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

## "STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburg.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburg Philadelphia, &c. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M.

For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 10 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Fr'ght. Ag't.

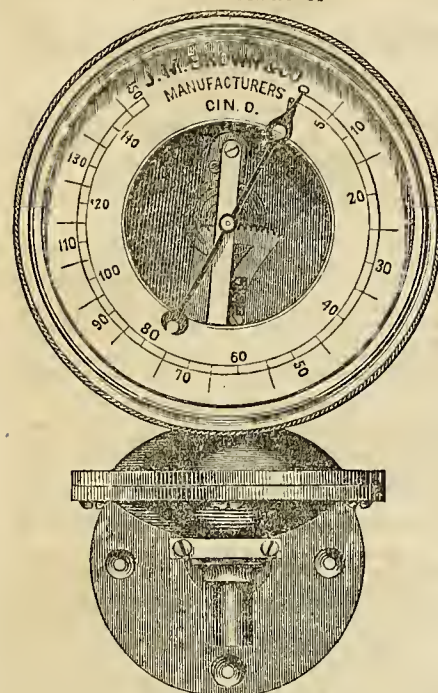
Indianapolis, Sept. 10, 1856.

[mb20-1y.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front Street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

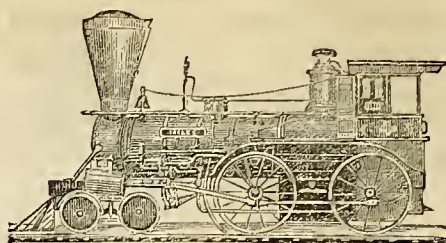
### DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalchone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tuiyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Ties, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI,

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1855. 9 South William Street.

### A. B. LATTA'S

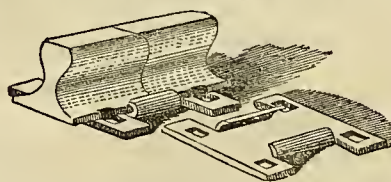
### Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

ap17 A. B. & E. LATTA.  
J. B. GREEN, C. S. GREEN.

### CINCINNATI RAILWAY



### CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

Feb. 14 ly.

J. B. GREEN & BRO.

### THE SCHENCK MACHINERY DEPOT

AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

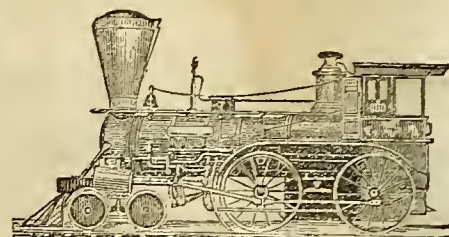
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Ang. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



THE undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

### Cotton Duck for Cr Covering,

Of any required width to 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers,

Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.

1006.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

### SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, &c., all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to McGowan's Patent Pumping Engine at the late Fair of the Mechanics' Institute. June 18, 1855

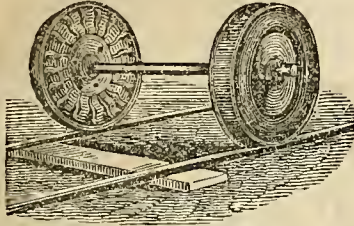


### FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

### WASHBURN WHEEL

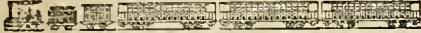
Having obtained the exclusive right to make this wheel



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL,

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
janl. Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,  
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 16\* JOSEPH DAVENPORT.

### S. C. THOMSON & CO MANUFACTURERS OF

### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n24 NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or  
Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of ALBERT M. SMITH, Patentee and Manufacturer, dec20-ly 13 North St. Paul st., Rochester, N. Y., or TAULMAN & LOW, 157 Broadway, N. Y.

### ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

D. D. MILLER,  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by E. MENDENHALL,  
31, '55] 3 College Hall, Cincinnati O.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by  
July 31 VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

### THOMAS D. STETSON, Mechanical Engineer,

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Frankliu county, Ky.," or the undersigned.

aug 14-ly P. DUDLEY,  
President of the Board.

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by  
feb 19-1m VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON,  
no 13 10 Wall st., near Broadway, New York.

### IRON BOILER FLUES, PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES.  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA. aug

### RAILROAD IRON.

### LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb 7. '56-2m.] A. H. GOODMAN & CO.,  
no. 7 Wall st., N. Y.

### RAILROAD CAR

### COACH TRIMMINGS.

### DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

### IMPORTERS

OF

Plain and Figured Mohair Plush,  
Printed & Unent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars;

ROPE MATTING, Every Width  
Oil Cloths for Head Linings, Enameled with Gold and Silver

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Cutted Hair, in Rope or Picked;

### PATENT FELT,

FOR CUSHION & MATTRESS FILLING  
N. B. We have the Plush in bond for exportation.  
sep 18 DOREMUS & NIXON.

### RAILROAD RECORD,

### BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts, Cincinnati



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC K. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb5-tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1866.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

dec11 Second avenue, corner of 22d street, N. Y.

T. F. RANDOLPH &amp; BRO.

Mathematical Instrument Makers,

N. W. Cor. 5th &amp; Walnut sts.,

CINCINNATI, O.

Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR

RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened; the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY &amp; BROTHERS,

dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

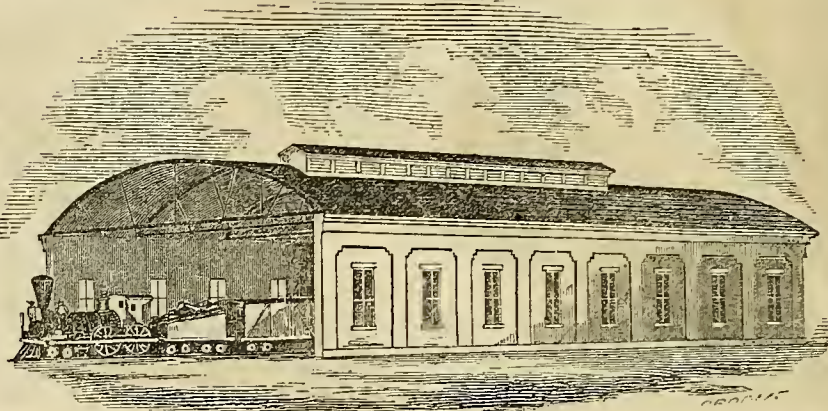
MIDDLETON, WALLACE &amp; CO.,

Jan8-ly 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



Office, No. 57 West Third Street,  
CINCINNATI, OHIO.

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of iron supporting now in use, and no more than good wooden Trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

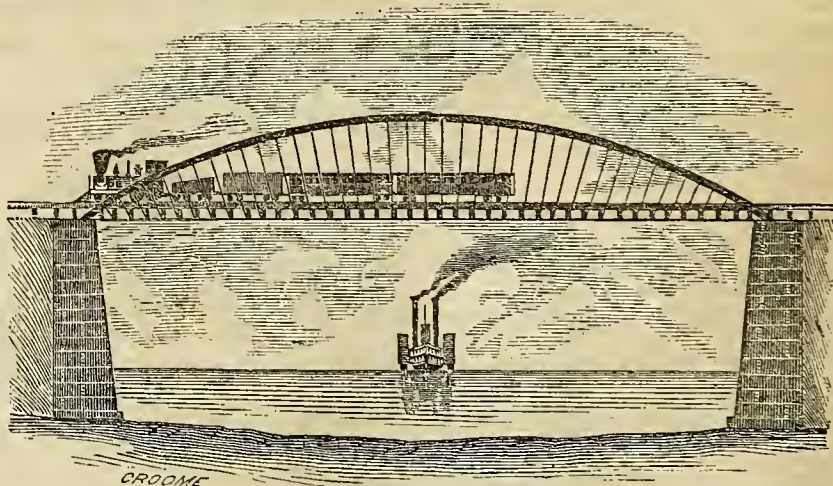
MOSELEY, WINSTON &amp; MOSELEY.

January 1st, 1856.

JOHN BANDON &amp; CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *tubular iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by responsible obligations.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

THOS. W. H. MOSELEY.

Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,..... MAY 7, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors.

### CONTENTS.—NO. 11.

#### EDITORIAL.

Ohio Farms—Division of Farms and Culture.....	161
Stocks and Stock Boards.....	162
Geology of the Railroads.....	163
Sonora Exploring and Mining Company.....	164
Rivetties.....	165
Baltimore & Ohio R. R.....	169

#### RAILROAD DAGUERREOTYPES.

Connecticut River R. R.....	165
-----------------------------	-----

#### MISCELLANEOUS.

State Finances.....	166
Catawissa, Williamsport & Elmira R. R.....	166
Decision of Judge Krebs in the Baltimore & Ohio R. R. Case.....	166
Southern Pacific R. R.....	170
Trusting to One Man.....	170
Grand Trunk R. R. Co.....	170

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	168
London Quotations.....	169
Cincinnati Stock Sales.....	169
Monetary and Commercial.....	169
Sales at the New York Stock Board.....	169

**PORTABLE FORGES.**—We would invite the attention of Railroad Superintendents and Master Mechanics to the advertisement of W. G. Hyndman's Patent Portable Forge and Bellows. It is very compact, occupies little room, and we can testify from using it in our own establishment for some time past, that it works well. These forges just meet the wants of practical men for portable forges.

**AMERICAN ENGINEERING ILLUSTRATED.**—The above is the title of a practical work, to be issued in numbers, to supply the want of correct mechanical drawings to practical and scientific men. Each number will contain two magnificent lithographs, taken from correct drawings, on a sheet, 24 by 30 inches. We have received the first two numbers, containing engravings of the new steam engine and pumps for the sugar refinery in New York. They are well executed, and give high promise of a useful periodical. If the author carries out his design in a style corresponding to the numbers before us, he will deserve the thanks of mechanical as well as scientific men.

The work is published monthly by G. Weisborn, 131 Fulton Street, New York.

## OHIO FARMS—DIVISION OF FARMS AND CULTURE.

We occasionally touch upon the subject of agriculture, especially as, in a State so largely agricultural as Ohio, it is a subject of great interest; besides this, the present high prices of every species of food drives us naturally to consider, if possible, the causes of what seems an unnatural state of things.

Let us first examine the cultivation of lands. The division of farming lands in Ohio in 1850 were:

Farms.....	143,807
Improved Land.....	9,851,493 acres.
Unimproved do.....	8,146,600 “

Total lands attached to farms.....	17,997,493 “
Average size of farms.....	125 “
Wild land, not enumerated in farms.....	7,163,507 “

It appears, then, that in unimproved farm and wild lands 15,954,507 acres are without cultivation of any sort; that is, about two-thirds the surface of the State.

Of the two millions of people in the State in 1850 about 1,400,000 were agriculturists. Of this number, one-third were children, and half the remainder women. The farms of Ohio are, therefore, cultivated by about 500,000 laborers. As the quantity of improved land is about ten millions of acres, it follows that each agricultural laborer cultivates twenty acres, and on each farm there are ten persons, giving twelve acres to each person.

From these facts we may draw some deductions of general interest in regard to the agriculture of this State.

**FIRST**—The average size of farms is small (125 acres), and especially when considered in reference to cultivated ground, which is 65 acres to each family of ten persons.

**SECONDLY**—As one-half the leading products of the State are exported, it follows that, in reality, a family of ten persons is supported on about 35 acres of cultivated land; or (assuming the amount a little larger) on 4 acres to each person.

**THIRDLY**—As the State contains 25,000,000 of acres, if we allow one-fifth for woods and roads, and suppose the half product now exported to be applied to the support of the producers, we find that Ohio can readily and easily support ten millions of people.

**FOURTHLY**—But we know that four acres of arable ground is double enough for the support of a single person; and hence, if the time should ever come in which it would be necessary for the greatest possible population to be supported on the soil of Ohio, twenty millions of people may be supported in this single State!

We come now to one of the most important parts of this inquiry. In such a state of things, what has caused the great advance of prices? There are several reasons. One we have more than once alluded to in the *Record*—the increase of the civic population

at the expense of the rural; that is, the greater increase of consumers than of producers; this is constantly going on. But that is not all. We see, in the above statement, that land is not cultivated in skilled labor. If it were, we should not find that it required four acres for the support of each individual. The following are the averages per acre of the leading crops:

Wheat.....	1,800,000 acres.....	13 per acre.
Corn.....	1,800,000 “.....	34 “
Potatoes.....	50,000 “.....	100 “
Oats.....	500,000 “.....	28 “

Land.....4,150,000 acres.

It thus appears that the principal arable crops cover less than half of the “improved land.” The residue is in pasture, meadow, gardens, orchards, &c.

It would require but very little skilled culture to bring the average production of wheat up to 20 bushels to an acre, and corn to 45. Under good cultivation, these would be thought low rates. But what would be the effect? The amount of wheat produced would be 12,000,000 of bushels more; and the amount of corn 18,000,000 more! Such results would change the relations of the markets very materially. So in many of the minor articles the effect would be greater. Take potatoes as an example. A few years since potatoes were sold readily at 25 cents per bushel; but to-day they bring \$1 50, or six times as much. This is not so much owing to the potato rot, or other intrinsic difficulties of cultivation, as from the fact that few farmers pay any attention to this as a crop. Potatoes are cultivated on farms only in patches, not as a staple crop; but the very high price of potatoes shows that there is a constant demand for them, even at high prices. In fact, potatoes are the vegetable of which most persons would least like to do without. They have become an almost indispensable article of diet.

In conclusion, we say that there is great need of skilled labor in agriculture; for we have reached a point in which the only way by which lands can be made to produce profitable crops, and the people of towns and cities comfortably sustained, is by cultivating more land, and cultivating it well. Two-thirds of the land of Ohio is uncultivated, and the third which is cultivated produces only two-thirds of a crop; and yet Ohio is the best agricultural State in America.

There are some facts in our condition admonitory of a severe time coming (we mean several years ahead), unless they are corrected in time. One of these is the much more rapid advance of town population than rural; another is the ill cultivation of much of our lands. Let these elements continue as they are a few years, and a large part of our city population will be in a starving state; or the wages of labor must rise to a point which will arrest the advance of business, and consequently arrest the prosperity of the country.



## STOCKS AND STOCK BOARDS.

A Stock Board, properly constituted, is an association of brokers for mutual convenience in the transaction of their business, of buying and selling stocks—the actual getting of money out of an investment, or the putting of it in an investment. A one year ago invested ten thousand dollars in the stock of a railroad company. To day he wishes to employ his money in a business transaction; he knows no one who wishes to buy his stock, and therefore calls on a broker: the stock is offered, and A gets his money, less the broker's commission. B to-day has money to spare, and wishes to invest in the stock of a particular road. He knows of none for sale, but, on application to a dealer in stocks, makes his investment at the market price. This process is continually going on in large communities, and the multiplicity of transactions renders a brokers' board a very useful, indeed, an indispensable appendage to the business portion of every large commercial mart. But it will be observed that these transactions are actual cash operations, made in good faith, and carried out in actual payment and delivery. If such were the only transactions of a stock board the quotations of the sales would be actual and unvarying indications of the condition of the money market and the appreciation in which the particular variety of stock was held.

How different would be the position of this class of securities under a legitimate order of things, from the present gambling operations at the Brokers' Board in New York.

Let us instance a single prominent stock, in which it cannot be said that one party possessed the advantage of greater information than another. We refer to the New York & Erie R. R. The company makes its annual reports with great care, and under the oath of its officers. Its real value in the market, therefore, should be very nearly a fixed one. The following are, however, the quotations at the various periods, as taken from the transactions at the New York Stock Board:

## NEW YORK &amp; ERIE R. R.

May 19, 1855.....	47 1/2
June 27, 1855.....	53 1/2
Oct. 24, 1855.....	53
Nov. 3, 1855.....	47 1/2
Feb. 20, 1856.....	59
March 19, 1856.....	56 3/4
April 12, 1856.....	57
July 16, 1856.....	63
August 11, 1856.....	53
August 30, 1856.....	59
Sept. 17, 1856.....	62
Oct. 4, 1856.....	61 3/4
Nov. 26, 1856.....	61
Dec. 10, 1856.....	61 1/2
Jan. 16, 1857.....	62 1/2
Feb. 16, 1857.....	57
March 16, 1857.....	53
April 16, 1857.....	48
April 29, 1857.....	41

The fluctuations of this stock are too great to be accounted for by the variations in the supply of currency in the money market; and the length of time at which the stock was held at each quotation was designed, when high, to get in outside investments, and when

low, to induce outsiders to sell at the low figures. It is the same operation that is carried on by professional gamblers when they get a green one in the gaming room, with the exception that the professed gambler confines his operations to men who frequent his haunts, while the stock gambler extends his field to take in widows and orphans, as well as those whose experience in the world should teach them better than to be duped by such shallow operations.

The evil, like all others which sap the foundations of civilized society, is easily pointed out—the cause and the remedy are more difficult to detect. The New York *Times* gives a sensible article on this subject, which we give entire:

"REFORM IN STOCK DEALINGS.—The demoralization of the N. Y. Stock Exchange Board, growing out of the unlicensed gambling operations of which, for the last six or eight months, it has been made the scene, has not only provoked the indignant comment of the outside public, who own or feel interested for the numerous values which, like dice, are played with in Wall street, but good men within the Board of Brokers have recently felt called upon to remonstrate. A motion, we observe, has been entered to limit the time contracts at the Board to sixty days, instead of twelve months, the present privilege. It is possible, when the motion comes to be voted upon, as it will in a few days, that an amendment may be tried to further reduce the limit to thirty days; but, as a two-thirds vote is required to change the rule at all, the success of this movement is said to be questionable. That the Board will have to come to a thirty days limit voluntarily; or, what would be still more desirable, adopt the London plan of selling for cash or 'the account'—that is, a day, certain, in which all the contracts of the month are to be settled, and the proper transfers made—or else be driven by legislation to three or five day contracts, appears, in the present condition of things, to be inevitable. The more creditable policy, certainly, would be for the old and conservative members, who desire to see their Association brought back to its original purpose as well as name—a Board of *Brokers*, to do the stock business of the public, as between legitimate buyer and seller, instead of being, as it is now, a band of reckless *Jobbers*, three-fourths conspiring by time sales to depreciate the investments of the public, and the other fourth ready, on occasion, to unduly inflate them—would be to strike hold for the most thorough reform, relying for success on the force of the existing and pressing necessity of doing something which shall be effectual to restore the Board to a proper degree of respectability and confidence.

"There is no other prominent Stock Exchange or Bourse in the world at which, as an official practice, longer time bargains than four or six weeks are permitted. The great bulk of the dealings are, and should be, for cash, or three or five days. In Philadelphia the limit is five days. But if, for the convenience of the very large as well as numerous transactions in a city like New York, the practice, as in London and Paris, of buying and selling for a day certain, within the current or succeeding month—in other words, for a common day of account, to be fixed for each stock, or class of stocks, by the Board

of Brokers, should be deemed advisable, the public would have no reason to distrust it, at least until tried and found subject to unpardonable abuses. While it would be a convenience to parties desiring to provide for purchases some weeks ahead, without incurring the double brokerage for buying and carrying the stocks, it would afford every rational facility for speculation, if that is desirable, on the future of the market. Beyond this, time bargains are not permitted to be registered in England or France, nor are they anywhere essential to the real convenience of buyer or seller. With a purchase or sale for cash or the monthly account, the duty of the stockbroker to his customer ceases. Then, if the operation be a speculative one, or based upon the convenience of the party to pay for or deliver the stock, and the desired result not yet attained, the office of the money broker begins. The stock is taken up and a regular loan effected upon the certificate, or else a continuation to the next account day duly bargained for. Options are thus wholly dispensed with, and the public is spared the offensive, and often damaging record of the bets between *Bull* and *Bear* to the extent of millions per day, that one will deliver to or receive from the other, sometime within sixty or ninety days, or six, or nine, or twelve months, without notice, certain stocks, at a given price below or above their current value for cash.

"We have thus glanced at the nature of the reforms which all the commission members of the Stock Exchange ought to desire, and which we are quite sure are desired by the oldest and most respectable of their number, without intending, at present, to enlarge upon the mischiefs or demoralization of the business as now and of late conducted. These are sufficiently palpable to the public, and have been for more than a year past, reaching as they do the interests and shocking the confidence of hundreds and thousands of the best people in the country, who carefully regard, as they have honestly earned and paid for, the values thus daily staked on the mercy and caprice of that class of fancy operators who notoriously rule the dealings at the Board of Brokers. If the light in which this state of things is already regarded by the community is not understood or heeded in Wall street, the reasons why the evil is not corrected where it originates will soon be susceptible of easy explanation. It may be plausible enough for the master spirits in the street, whose wicked caprice and more than willing malice have depreciated the investments of the public by fictitious time sales to the extent of millions, where upon a reaction they would not be able to respond to thousands, to say that if the property thus dealt with have real or intrinsic merit, it would withstand the attack; but the public are not so blind as to regard the great elements of confidence and credit thus lightly. The fair discussion of values is one thing—a constant, systematic and unprincipled assault upon them another. The motive to such assault becomes doubly strong, and the means almost invariably held to justify the end, where, by the demoralized rules and easy forbearance, in case the gamblers lose the stake they play for, at the Board of Brokers, these parties can sell *ad libitum* at their own option, to deliver at such time within two or twelve months as may suffice to undermine the credit of the values thus sold and assaulted, or if failing in this, not to deliver at all. The evil is equally great, though the mischief, perhaps, not quite



so wide spread, if the game of inflating and cornering stocks be selected, as it often is by the same parties. The morality of the operation is quite as loose, and the end usually accomplished, if accomplished at all, by the same system of exaggeration, and through the same pernicious means of unlimited time contracts."

This is a subject that directly interests every one in our country, and we sincerely hope that it will meet the serious attention of the honestly disposed among the Board in New York. If it does not, the Board must soon lose the influence that it once exerted, and will be regarded in the same light as experienced men regard the Faro bankers. The people of our country are too intelligent to be forever duped; and the press, whatever may be said of its venality, is too independent yet to attempt to conceal the outrages character of such operations.

#### GEOLOGY OF THE RAILROADS.

*Junction Railroad—Capacity of Fertile Lands to Sustain Population—Cincinnati, Hamilton & Dayton Railroad and its Connections.*

BY DAVID CHRISTY.

MESSRS. EDITORS:—In one of your former numbers a promise was given to prepare, from time to time, a series of articles on the Geology of the Railroads radiating from Cincinnati. Causes unlooked for have prevented the prosecution of the task. It is now resumed. A residence of near twenty years at Oxford afforded the writer ample opportunities of studying the geology of the route of the Junction Railroad, which extends from Hamilton, through Oxford, to Indianapolis. It seems most natural, therefore, for me to take up this railroad first, and, in connection with it, to notice the other branches and connections of that great *Trunk Road*, the Cincinnati, Hamilton & Dayton Railroad.

Before proceeding to details, it may be well to offer a remark or two on the connection between the geology of any given section of country and its agricultural capacity.

What more do you wish to know of a neighborhood, it may be asked, than that its lands are fertile, and capable of supporting a large population, and supplying abundant products for transport? To this question it need only be said, that productive lands do not always retain their fertility. Cultivated lands undergo a process of exhaustion, and become less productive, except care be taken to prevent such a result. This diminution of fertility may be due to one of three causes, or to all combined. Let me explain:

All soils have been derived from the decomposition of rocks. Productive soils contain two classes of elements which enter into the combination of vegetation during the process of its growth. Chemists designate these elements by the terms *organic* and *inorganic*. The *organic* elements are derived from the atmosphere, and from decomposing animal

and vegetable substances; the *inorganic* elements are all to be found in the *primary* rocks constituting the mineral substances of which they are composed. By the decomposition and disintegration of this class of rocks, these elements have been transformed into *soils*, or have supplied the materials of the secondary rocks, from which, by decomposition, the greater portion of soils have been produced. These *inorganic* elements consist of potash, soda, lime, magnesia, manganese, iron, silica and alumina. But while these elements are distributed with considerable regularity in the primary rocks, so as to supply to soils thence derived, in due proportion, all the elements essential to the growth of vegetation, yet such is not always the case in the secondary rocks, or in the soils derived from them. In the analysis of the *feldspars*, *micas* and *hornblendes*, associated with the *quartz* of the primary rocks, we find the *alkalies*, the *iron* and *alumina* always present; but in the secondary rocks such uniformity rarely ever prevails. For example: in the sandstones, often, there is too great an excess of *silica* to afford permanently productive soils; in the slates there is generally an excess of *alumina*, so as to supply little else than clay to their soils; but the limestones, in their decomposition, afford an abundance of *lime*, which, of all the *alkalies*, is the one most essential in giving the greatest fertility to lands.

The *organic* elements essential to vegetation are oxygen, hydrogen, nitrogen and carbon, and are constituents of or embraced in the atmosphere; sulphur and phosphorus are intermediate elements, also essential to vegetation, which are universally distributed in soils—the former mostly in abundance, the latter sparingly.

Now, the diminution in the fertility of lands, as we stated, may be due to one of three causes, or to all combined. One or more of the *inorganic* elements, in such a state as to be taken up by vegetation, being sparingly present in soils, may become exhausted by cultivation; or there may be a deficiency of the *organic* elements present in the soils, to promote the proper chemical changes in the *inorganic* elements, so as to adapt them to the absorbents of the growing vegetation; or there may be a sufficient supply of both of these classes of elements in soils, and a deficiency exist in the *sulphur* and *phosphorus*, when the results may be equally unfavorable to the maturing of crops.

With the statement of these facts you will readily understand, Messrs. Editors, why the geologist, upon learning the true geology of any district, can give an opinion, proximately correct, as to its fertility; and you will understand, also, the importance of a knowledge of the geology of the country intersected by this railroad, to the distant friends of the enterprise. With soils containing the basis of an inexhaustible fertility, and with the capa-

city of sustaining a population more than quadruple the present inhabitants, the distant stockholders will feel assured that the value of investments in this road must be enhanced, from year to year, by the annually increasing ratio of travel and of freights which will be secured to it, until the population reaches its maximum density.

The geology of the territory intersected by this railroad is not complicated. The rocks belong to the secondary class, and to the geological division, or formation, called *Silurian*. They are naturally divided into *Upper Silurian* and *Lower Silurian*, corresponding very nearly to the European formations bearing these names. The strata of which the lower division is composed are nearly horizontal at Cincinnati and Hamilton; but from about the State line between Ohio and Indiana, they have a moderate *dip* to the west. These strata are composed of alternate beds or layers of *limestone* and *marlite*. The *marlite* is composed mainly of the *silicate of alumina* and *lime*, and resembles clays of various shades of gray and blue. The *limestone* is mostly of a blue color, and its strata, with those of the *marlite*, range in thickness from an inch or less to one, two and three feet—the *marlite*, however, mostly predominating. This arrangement has been very favorable to the intermingling of the elements of the strata while decomposing, and has given to the soils thus produced an abundance of *carbonate of lime*, constituting an *inorganic* basis of great fertility. This *Lower Silurian* occupies the distance between Cincinnati and a point six miles west of Connersville, Indiana, where, on ascending the main ridge west of the Whitewater river, the *Upper Silurian* rocks are presented.

These *Upper Silurian* rocks are also *limestone* of a buff gray color mostly, with but a small proportion of *marlite* between the strata, and are, generally, readily decomposed by atmospheric agencies. This formation extends nearly to the termination of this road, but is mostly covered by the *Diluvium* described below. It has been called the *Cliff Limestone*, by Dr. Locke, on account of the precipitous cliffs which it forms along the streams of water that have cut their channels into its strata. Wherever the rocks of this formation have supplied the materials of soils, great fertility usually prevails.

Reposing irregularly upon both classes of the rocks already described, is an additional formation known as the *Drift*, or *Diluvium*. It is composed of boulders and pebbles of various sizes and classes of rocks, intermingled with sands and clays. Its rocks are rounded by attrition, have been transported from distances, and include granite, syenite, gneiss, greenstone, trap and limestone. The *limestone* pebbles are usually greatly in excess over those of a primary character, so that the soils derived from the decomposition of this *Drift* are little, if anything, inferior to those



of the underlying *Silurian* rocks. This formation lies in patches, sometimes of considerable extent, and has a depth varying from a few inches to more than a hundred feet.—Over all this *Diluvium*, as well as over all the parts not covered by it, there exists a rich loam, the accumulations of ages, and consisting of both *organic* and *inorganic* elements in such proportions, and of such depth, as to serve well the agriculturist for the production of the most bountiful crops; and, then, beneath this loam there exists a basis of *inorganic* elements of inexhaustible extent, rendering the lands, by proper cultivation, of perpetual fertility.

The greater portion of the rocks of both these formations abound in petrifications of marine *molluscs* and *polyps*. The *organic* elements thus retained in the rocks may be sufficient to be of much value to vegetation. Indeed, by a discovery made in the laboratory of Dr. LOCKE, a year or so before his death, by his son, Prof. JOHN LOCKE, JR., it would appear probable that there will be little need, so far as the *phosphates* are concerned, for the addition of *guano* to these soils. In testing the fossils, by chemical analysis, he discovered that they contained *phosphoric acid*, derived, of course, from the animal matter of the shell-fish originally inhabiting the shells.

The seven counties through which this railroad passes include a total of 1,280,441 acres of land, of which 617,185 acres were under cultivation in 1850, thus leaving 663,256 acres, or more than one-half of the whole territory, then unimproved. The total population in 1850, including the city of Hamilton and all their towns, was 121,103 persons, or only one to each 10½ acres of land. The value of the products of agriculture and of animals for that year, in these seven counties, reached the sum of \$8,124,482.

The population of these counties is about as dense as that of other counties equally distant from Cincinnati. The lands, too, are fully equal in fertility to those traversed by any other railroad extending from that city. They are rapidly filling up with an enterprising population, and greatly increasing their products. The completion of this railroad will give an additional impulse to their industry, and both travel and freight will augment in a cumulating ratio.

I cannot close this communication without referring to another point. The city of Connersville has a water power, derived from the Whitewater river and from the canal, which is scarcely inferior in extent to that of Hamilton. There are several manufactories already in operation at Connersville, and the completion of the Junction Railroad will impart a new impulse to manufacturing enterprise at that place, greatly to the profit of the road. Here, in closing this part of my article, allow me to add a remark or two:

The capacity of fertile lands to sustain population is not well understood in our country. From the evidence given in 1843 before the committee on allotments of land in the British Parliament, it appears that 112 bushels of wheat had been obtained from an acre of land dug with the spade; that the average profit derived from cottage allotments was at the rate of \$100 an acre, and that one man, on the eighth of an acre of very indifferent land, had grown a crop worth \$25. It is also in evidence that a Flemish farmer of six acres of moderate land, obtains from two acres and a half as much grain, potatoes, butter and milk as are required for the consumption of himself, his wife, and three children, and sells the produce of the remaining three acres and a half. At one time the Roman law did not allow but seven acres for each citizen, upon which to support a whole family. At present the average size of landed estates in France is only twenty acres.

It may be well to extend our remarks to the other branches or connections of that great *Main Trunk Road*, the *Cincinnati, Hamilton & Dayton Railroad*, which is ramifying its branches indefinitely to the westward and northward, and forming connections eastward of the greatest importance to its business operations. There is but a shade of difference in the agricultural character of the lands through which all its connections pass, either northward or westward. The *Drift*, or *Upper Silurian Limestone*, almost everywhere, in these directions, occupies the surface, and affords a good basis for productive soils. The eastern connections pass into formations of a different character, of which we shall not speak at present. To give a true idea of the character and prospects of the Cincinnati, Hamilton & Dayton Railroad, it is only necessary to enumerate its branches and connections. They are as follows:

1st. The Eaton & Hamilton, connecting at Hamilton, and extending to Richmond, Ind. At the latter point the E. & H. connects with the Cincinnati & Chicago Road, which is now about finished to Logansport, and in progress to Chicago. This will be the shortest line between Cincinnati and Chicago.

2d. The Junction, Cincinnati & Indianapolis Road, also connecting with the C., H. & D. R. R. at Hamilton. This road is nearly ready for the iron to Connersville.

3d. The Greenville & Miami Road, connecting with the C., H. & D. R. R. at Dayton; thence running through Greenville, O., to Union, on the State line; there connecting with the Bellefontaine & Indiana Road. This line of road will be extended from Union to Fort Wayne; about one-third of the work is already done.

4th. The Dayton & Western also connects with the C., H. & D. R. R. at Dayton, and

brings business from points east of Richmond, Ind.

5th. The Dayton & Xenia Road also forms a connection with the C., H. & D. R. R. at Dayton, and interchanges business for points on their several lines.

6th. At Dayton, also, the C., H. & D. connects with the Mad River & Lake Erie Road running to Sandusky, and through it does its business with connecting roads to Cleveland and Pittsburg and all points east; also its business to Toledo, Detroit and Chicago, and all points further north and west.

7th. The Dayton & Michigan Road also makes direct connection with the C., H. & D. R. R. at Dayton. This road extends from Dayton to Toledo, a distance of 140 miles. It continues north of Dayton, up the same rich Great Miami Valley in which the C., H. & D. is located. The road is only in operation to Sidney, but is nearly ready for the superstructure to Toledo, and it is expected the whole line will be opened to public travel during the present year. This road, when completed, will be a very important connection to the C., H. & D. R. R. At Sidney it connects east and west with the Bellefontaine & Indiana Road at Lima, with the Pittsburg, Fort Wayne & Chicago Road, making a very short and desirable route to Fort Wayne and Chicago, of uniform gauge. At Toledo it will connect with many important roads, one of which, to Detroit, will doubtless bring a very large business from Western Canada, as well as from Montreal and Quebec, over the Great Western Canada Road. The road, now nearly completed, from Detroit to Grand Haven, opposite Milwaukee—distance from Detroit 185 miles—will also pour over the D. & M. Road, on to the C. H. & D., no small amount of traffic.

It will be seen, from the above sketch, that the C., H. & D. R. R. has, in the future, a bright business prospect.

#### SONORA EXPLORING & MINING CO.

We give below the report of the agent of this company to the officers in Cincinnati for the month of February. The business of the company seems to be progressing rapidly under its energetic manager, and bids fair to make this company one of the best paying companies that ever went to our well-paying western shores.

TUBAC, 28th, Feb., 1857.

MAJ. S. P. HEINTZELMAN, U. S. A.,

*Pres't Sonora Exploring & Mining Co.*

*My Dear Sir:*—I come now to hand you office work for the month of February, which has been devoted entirely to our new and interesting mining region at the Cerro Colorado.

The discoveries here now reach about twenty distinct veins of great richness. The only



vein prospected to any extent is your namesake, the "*Heintzelman*," which yields, upon final and full assay, 31 marcs per carga. But few mines in Mexico, or any part of the world, produce so rich a yield, and we are delighted with the prospects in this region.

You will find the particulars of assay and reconnoissance fully set forth in the reports of Messrs. Brunckow and Schuchard, herewith enclosed, which we hope will be properly translated.

Mr. Schuchard has prepared a map of the vicinity, and a drawing of the locality, which is entirely reliable, and also enclosed. We also have the pleasure of forwarding a more perfect view of *Tubac*, from the pencil of Mr. S., which we hope may reach you in time for your forthcoming pamphlet. These will be followed up closely by accurate maps and spirited sketches of localities which may come into our possession by purchase or discovery.

All you need is information of this country, and all we need is means.

We shall endeavor to get a specimen of this ore forwarded through the Military Express from Calabazas. It is exceedingly to be regretted that we have no facilities for forwarding you specimens, as we are aware their richness would satisfy every one of the propriety of embarking means in our company as a regular *investment*—the *speculation* of the matter has ceased.

It would be premature to forward you estimates at this early day; but some rude estimates of the expenses of working the "*Heintzelman Mine*," show a profit of \$400 per week per hand.

We make no requisitions upon you for expensive machinery, but rather prefer to test the mines in the most primitive manner, and under every disadvantage. We hope to astonish you more by the *economy and simplicity* of our arrangements than by extravagant demands for machinery.

I cannot commend too highly the ability, sagacity and judgment of our engineers, and beg to assure you that you may rely on their reports as fully as a mint certificate.

We have no chance but to rely upon our own resources here on the ground, and only need some instruments and acids for making as perfect assays as can be made in New York or San Francisco. Our friends in Sonora propose sending us specimens for examination and assay. With this "*Assay Office*" fully supplied and properly regulated, we have the mineral wealth of this country and Sonora *entirely in our hands*.

Messrs. Brunckow and Schuchard proceed to-morrow to the Pajaro Mountains, near the Arizona, for the examination of a section which, if we are correctly impressed, will equal, if not exceed, the Cerro Colorado region in richness, the full details of which you

may expect by next mail; also, the result of Mr. Ehrenberg's operations in Sonora.

Very respectfully,

Your friend and obt. servant,

CHARLES D. POSTON.

## Railroad Daguerreotypes.

No. LXXX.

CONNECTICUT RIVER R. R.

OFFICERS.

President—D. L. HARRIS, Springfield.

Treasurer and Secretary—SAM'L F. LYMAN, Northampton.

Superintendent—W. B. BRINSMADE, Springfield.

DIRECTORS.

DANIEL L. HARRIS, Springfield.

CHESTER W. CHAPIN, "

HENRY W. CLAPP, Greenfield.

ROWLAND MATHER, Hartford.

WINTHROP HILLIER, Northampton.

CHAS. P. HUNTINGTON, Boston.

IGNATIUS SARGENT, Brookline.

JAMES K. MILLS, Boston.

F. B. CROWNINSHIELD, Boston.

The ANNUAL MEETING of the stockholders is held on the third Wednesday in January.

The CAPITAL STOCK of the road is:

No. of shares issued.....12,283 old; 3,075 pref.

Price per share.....\$100.

Capital paid in.....\$1,591,110.

Am't of last dividend...\$37,192.

RUNNING EQUIPMENTS.

No. of locomotives..... 12.

Baggage & Exp. cars.... 6.

Freight cars.....312.

The following are the results of operation for the years 1855 and 1856. Fiscal year ends Nov. 30:

RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$135,960 75	142,925 95	143,675 43
Freight.....	130,508 04	129,647 38	131,404 89
Mails.....	6,795 45	7,160 87	6,203 97
Express.....	3,300 00	3,800 00	4,273 24
Miscellaneous.....	1,206 47	3,023 35	3,112 14
Cost of operation, including \$30,000 rent for use of Ashuelot Road.....	\$174,628 57	192,067 62	197,045 71

DETAILS OF CONSTRUCTION.

Length of road.....52.35 miles

Termini.....So. Vernon, Vt.

Width of gauge.....4 feet 8½ inches.

Single track.....52.35 miles.

Sidings.....44,230 feet.

Length of rail-bars.....18 and 21 feet.

Weight per yard.....56 and 61 lbs.

Kind of iron.....American and English.

When laid.....1844 to 1851.

Kind of rail.....T.

Wear and tear.....12½ per cent.

Ties.....2300 per mile.

Kind of wood.....Chesnut.

Length.....7½ feet.

Size.....6 by 7 inches.

How often changed.....8 years.

Ballast used.....Gravel.

Kind of fuel.....Wood.

Cost per annum.....\$19,360 39.

CARS OF EVERY DESCRIPTION.—Our readers will see by reference to our advertising columns, that the well known establishment of C. Wason & Co. has passed into the hands of Messrs. Merrill & Bowen, practical men of great experience in the establishment which now takes their name. No pains will be spared to sustain for their establishment a reputation so well earned.

## BREVITIES.

—LITTLE MIAMI R. R.—Mr. W. H. Clements, so long known as the efficient and systematic superintendant of the Little Miami R. R., resigned that position on Saturday last, to accept the important post of Superintendent of the Ohio and Mississippi R. R. Mr. Clements has been engaged on the Little Miami R. R. for the last eighteen years, and has during this long period, gained a position of the highest eminence in railroading. He now transfers his labors from the well-organized road upon which he has been so long engaged, to take the helm in one which has yet to steer through the breakers of an organization. We have no doubt but that he will be found equal in all respects to the task, and that the Ohio & Mississippi R. R., now just opened, will soon rank among the best regulated and safest roads in our country.

P. W. Strader, Esq., it is understood, will also transfer his services to the Ohio & Mississippi. We had supposed that it would be the interest of the Miami road to retain this gentleman in a more responsible position, if there is such a one, on their own road. But we presume that the change is dictated by a desire to put the O. & M. R. R. on the best possible footing. It is a road of vital importance to our city.

Henry C. Creveling, train-master of the Little Miami, also leaves this road for the same position on the O. & M. R. R.

—ROCK ISLAND & ALTON R. R.—The Board of Directors of this road have called in an assessment of five per cent. on the subscribed capital of this road, to be paid on June 10, and further assessments of five per cent. to be paid on the 10th of each successive month thereafter.

—PEORIA & HANNIBAL R. R.—This road advertise for proposals for grubbing, graduation, etc., of about fifty-five miles of their line.

—MANASSAS GAP R. R.—The new bridge over the south branch of the Shenandoah river, was opened for use on Tuesday, April 28. The trial train was loaded to 90 tons, and attached to a heavy locomotive. The total deflection was 7-16ths of an inch. We understand that the grading from Woodstock to Mt. Jackson is nearly complete, and that the iron will arrive and track-laying commence during the present month.



—CINCINNATI, HAMILTON & DAYTON R. R.—  
The annual meeting of this company was held in this city on Monday, and resulted in the re-election of the old directory—S. S. L'HOMME-DIEU, President.

#### STATE FINANCES.

The editor of the *Bankers' Magazine* has issued a series of papers in that work showing the Foreign Commerce of each State for each year from 1820 to 30th June, 1856. This series of tables demonstrates the imports and exports, and tonnage, &c., for each fiscal year, and thus exhibits the comparative growth of each State.

A second series of papers is now commenced in the same work, of far more importance to the financial community and to the political economist. This is a tabular view of the finances of each State for each fiscal year from 1825 to 1856—showing 1. The aggregate funded debt at the end of each year. 2nd. The annual interest on such debt. 3d. The aggregate taxable property in the State each year. 4th. The gross revenue of the State. 5th. Gross expenditures. To this is added by some of the Treasurers, the balance of available fund in the State Treasury at the end of each year.

This series of tables will show, more clearly than any other documents can do, the past and present financial condition of the State, and will enable persons at a distance to estimate more clearly the value of State funded debts.

We have already published a synopsis of the progress of the State of Ohio in the above particulars. Maryland exhibits a still stronger position financially. By a wise provision at the time her large debt, was contracted, a sinking fund was created, the operation of which will cancel the whole debt before its maturity. This fund is already one third or more of the debt, and will by its own accumulating powers be equal to the principal in less than ten years.

Maryland suspended specie payment on its interest, when financial troubles prevailed, also in Pennsylvania, Indiana, Illinois, &c., but Maryland resumed payment in January, 1848, when the yearly interest was \$657,000, and at the same time funded the arrears of interest up to that year. The taxable property of the State was then about one hundred and ninety millions, yielding a revenue of \$1,000,000. The property is now over two hundred and fifty millions at low assessments, and the revenue is \$1,230,000; allowing that the burdens of taxation are much lighter *pro rata*, than twenty years ago. The gross disbursements of the State for the year are less than one-sixth those of the city of New York. In order to show the progress of Maryland since 1833, we extract from the official report in the Magazine, the following items:

Year.	Funded Debt.	Ann'l Interest.	Taxable Prop'y
1833.....	\$1,130,000	\$84,900	.....
1840.....	\$1,169,000	593,560	\$196,000,000
1843.....	15,186,000	600,000	177,000,000
1850.....	15,922,000	635,000	191,000,000
1852.....	15,210,000	636,500	192,000,000
1854.....	15,132,000	629,000	243,000,000
1856.....	15,259,000	628,000	251,000,000

The above sum includes also the Sinking Fund, the actual debt in the hands of the public being about ten millions in round numbers.

The progress of the State in its Revenues is further shown in the annexed items for the same period:

Year	Gross Revenue.	Annual Expenditure.	Cash on Hand.
1833.....	\$17,000	\$37,000	\$1,800
1841.....	927,000	834,000	91,000
1845.....	966,000	948,000	199,000
1850.....	1,227,000	1,467,000	245,000
1852.....	1,210,000	1,300,000	190,000
1854.....	1,208,000	1,175,000	378,000
1856.....	1,230,000	1,230,000	592,000

The State has disbursed, for interest alone, in the last 24 years, \$26,141,000.

#### CATAWISSA, WILLIAMSPORT AND ELMIRA R. R.

The last annual report of the Catawissa, Williamsport and Erie Railroad Company has just been published. The work is daily becoming of more importance. During the latter part of last summer the Catawissa road was put under efficient management, and the President of the Williamsport and Elmira Railroad was induced to accept its Presidency. It is well stocked, and will continue to be vigorously worked. The floating debt has been extinguished, and such arrangements made as it is alleged will insure the continued payment of the coupons on the funded debt. The entire amount represented in the road, including construction, depots, equipments, &c., is \$3,722,016, nearly the whole of which went directly into the road. The money expended it is believed, purchased more of labor and material at the time of its expenditure than such a sum would now command. The capital is \$1,700,000; the first mortgage \$1,500,000; income bonds, \$221,500; chattel ten per cent. mortgages, \$122,500, and ten per cent. bonds, \$70,000; in all, \$3,614,000, exclusive of \$18,016 floating debt. On the 30th of August last the report shows the Company's liabilities and estimated income as follows:

Interest at 7 per cent. on first mortgage bonds.....	\$1,500,000	105,000
Interest at 7 per cent. on the income bonds.....	221,500	15,505
Interest at 10 per cent. on bonds subscribed.....	192,500	19,350
Interest on floating debt, say 10 per cent. as if funded.....	108,016	10,802
Total.....	\$180,557	
The present business of the road may fairly be taken at \$30,000 per month, though it is believed that it will average through the ensuing year, considerably over that sum.....	360,000	
Operating expenses, 50 per cent.....	180,000	
Total.....	\$180,000	

The Catawissa Railroad extends from near Tamaqua to Milton, and runs through a region full of coal, iron, etc. The Company owns about 1200 acres of coal lands, estimated to contain two million tons of coal.

#### DECISION OF JUDGE KREBS IN THE BALTIMORE AND OHIO R. R. CASE.

The following is an abstract of Judge Krebs' decision in the Railroad case, delivered in the City Circuit Court on Saturday last:

The Mayor and City Council of Baltimore vs. the Baltimore & Ohio Railroad Company—in the Circuit Court of the city of Baltimore, in the matter of the Petition of John Gregg and others, filed in this case.

Upon the application of the Mayor and City Council of Baltimore, made in its bill of complaint filed on the 10th day of January, 1857, in which it alleged that it was a holder of the capital stock of the said Company, to the amount of three millions five hundred thousand dollars; that the said Company had declared an extra dividend on its stock of thirty per cent., to be paid on or after the 12th day of January, 1857; that the declaring of said dividend was a wrongful and illegal act, in violation of the charter of said

Company, against the rights of the complainant, and in fraud of its chartered privileges; this court, upon the whole case as made in the said bill, passed an order on the said 10th day of January, granting an injunction against the said Company and its officers, and servants, prohibiting them from issuing or delivering under the resolution of said Company, declaring said dividend, any certificates of indebtedness, in payment of said dividend, to any stockholder of said Company, or to any one else.

The Company appeared and filed its answer to the said bill; an order was passed authorizing testimony to be taken in reference to the allegations in the bill; testimony was taken before the Commissioner, and returned; the defendants filed a motion to dissolve the injunction, which was set down for hearing. This motion was not heard, having been withdrawn by the defendants on the 24th day of March, 1857, who, on that day, filed their petition for leave to withdraw also the answer which it had filed, for the reason and purposes set forth in its petition, and the exhibits therein referred to.

In this stage of the cause certain persons, holders of the stock of the said Company, and belonging to the class of *private* stockholders as they are denominated, to distinguish them from the city of Baltimore and the State of Maryland, they being both stockholders, but of a different class, file their petition, which they pray may "be taken as filed, on behalf of all such shareholders who have concurrent rights with the petitioners, and for all persons interested in the dividend referred to, who may make themselves parties to the petition on such terms as the court may prescribe, the said shareholders being, as the petitioners allege, very numerous, and so dispersed that it would be impossible to make them all co-petitioners."

The petitioners allege that they "are interested in the dividend referred to in the Bill, answer and proceedings in the said cause." That, "if said dividend be legal the said Railroad Company is the debtor of the petitioners and others, who, after the 12th of January last, demanded the delivery of the certificates of indebtedness promised by the resolution declaring the dividend." They allege "that they have respectively duly demanded these certificates." And that the said dividend has thus become the property and right of the respective shareholders in proportion to their respective shares.

The petitioners assert that they were not made parties defendant to the said bill of complaint, and insist that they, or other stockholders, of sufficient number to make a substantial representation of the interests of the shareholders, should have been introduced as defendants. They complain that the injunction grievously affects them, and others in like interest, and that they are not able to move for its dissolution, because they are not defendants to the bill, and they pray by way of relief, that this court will allow them to appear, to be made defendants, and to move for the dissolution of this injunction.

It appears from the petition that, since their answer to this bill was filed by the Company, the city of Baltimore has chosen new Directors to represent its interests in the Company, in the place of the eight who represented it in the Board at the time of the passing of this resolution declaring the extra dividend, three of whom voted for the resolution, and for that reason were not re-elected by the city authorities, and that all of these newly elect-



ed directors had voted for a withdrawal of the answer at a meeting held on the day before the said application was made to withdraw it. By reference to this answer, which purports to be the answer of the President and Directors of the Company as constituted at the time it was filed, it will appear that it asserts the legality of this dividend, and the right and power of the Company to declare it, precisely as these petitioning stockholders do in this petition; that in fact it covers the whole ground upon which they allege their title to this dividend rests, and that under it their interests would be fully protected. The Directors of the Company, at that time, or the majority of them, fully represented the interests of these petitioners. They were the same Directors who managed the affairs of the Company when a dividend was declared, and when the bill was filed, and it was deemed altogether unnecessary at that time to require that the complainants, to entitle them to this injunction, should introduce any of the private stockholders into the bill as defendants, inasmuch as their opinions, and views, and interests, in connection with this dividend, were fully represented by the Board of Directors of the Company as then constituted. A new Board has since come into authority, and their movements in taking control of this case, and giving direction to its proceedings, has very naturally created the apprehension in the minds of these private stockholders, that their interests, according to their view of them, may not be as safe in the hands of the present, as they were satisfied they were in the hands of the former Directors. Hence their anxiety to be admitted as parties to this cause, to enable them to protect their interests so far as they may be affected by the proceedings therein. Not having made any application to be admitted as defendants until a few days after the change had taken place in the direction of the Company, it may be fairly presumed that they were perfectly willing to be represented by the Board of Directors as constituted before that change. However they now present this petition to the court, and have contended in it and more fully by their Solicitors at the hearing—

1. That this dividend was declared lawfully and properly.

2. That they are entitled to receive it from the Company, and are thus materially interested in this cause, and in having the injunction restraining the payment of it dissolved, and may be seriously affected by the final decree to be passed thereon.

3. That the complainants should have made them parties defendants in the bill filed in this cause.

4. That they have not relieved themselves from this duty by making the Company sole defendants, because the Company does not represent them.

5. That they are allowed to the relief they ask, that is to say, to be relieved to appear in the cause as defendants, and to move for the dissolution of the injunction.

The various questions that the solicitors for the respective parties have deemed it proper to examine at the hearing of this petition, have been argued with a degree of ability, power and zeal not often excelled in forensic discussions; and the research which they have exhibited in the investigation of the points that have been raised, seems to have exhausted the adjudicated cares as well as the elementary treatises.

After a most careful consideration of the arguments, and examination of the numerous authorities, on which the solicitors of the respective parties have relied, my mind has been brought to a conclusion which enables me to dispense with the discussion of several of the questions that were very elaborately argued at the hearing of this petition, and which have given to it much of its popular interest, and by so doing I shall contract my inquiries within such narrow limits as to make the mode on which I shall treat the question interesting only to professional minds.

These petitioners insist upon their right to appear in this case, to be made parties defendant; and to move for a dissolution of the injunction, and, necessarily, to their right to file an answer to the bill, inasmuch as, according to our practice, no defendant can move to dissolve an injunction until he has filed an answer; or, in other words, upon a right to come in before the motion to dissolve is made, and be made full defendants. Now I have not been convinced by the arguments and authorities relied upon by the solicitors of the petitioners that they are entitled to this right, assuming even, in their favor, that this dividend is lawfully declared; that they are entitled to it; that they are interested in this case and ought to have been parties to the bill, and are not represented on the record.

They claim this right to be made parties defendant, upon their own demand by petition, because they are interested in the subject-matter, and objects and purposes, of the suit, and ought to have been introduced into the bill as parties, before it was filed. They say, in effect:

1. That the bill is defective for want of parties.

2. That the court should require the complainants to amend it, by making them parties.

Can these petitioners, in this mode, object that this bill is defective for the reason alleged, and thus drive the complainants to an amendment? for that is the extent to which their pretensions go.

If they have such right, it might be reasonably presumed that it could be readily chosen, by reference to the treatises upon the practice and pleadings in courts of equity, where the rules long since settled, in regard to the mode of introducing into a cause parties improperly omitted, are clearly defined. I have carefully examined these treatises, and do not find that any one of them, in pointing out the several modes of taking an objection for want of parties, mentions that the omitted party himself has a right to appear, and make the objection that he has not been joined in the suit, and force the complainant to amend.

After a careful examination of the several elementary authors on this subject, I have become fully assured that not one of them mentions, or recognizes any such rule or practice as would justify this court in granting the prayer of these petitioners, and permitting them, upon their own demand, to be made defendant in this cause, by amendment of the proceedings. It is true that they all refer to "some cases in which the court has allowed persons who have not been made parties to take some part in the proceedings." 17 Law Library (Calvert on Parties) 35, and their authority for saying that the Court sometimes grants this permission rest upon cases which I shall hereafter refer to, and it will be found

that these cases, with a few exceptions, belong to a class in which *after a decree or a reference to a master*, persons who had not been made parties to the cause, but who were interested in the estate affected by the decree, or in regard to which, or to the parties interested therein, the master was charged to enquire and report, were permitted to *come in* by petition and *urge their claims before him*—a class of cases differing altogether from this.

These authorities are all that the uncommon industry and research, of the solicitors for the petitioners have been able to produce upon this point; and whatever effect may be claimed for them, I consider it more than counterbalanced, by the decision in the case of Ball vs. Turner, already referred to, and by the action of the late Chancellor Johnson in the case of McClellan vs. Bedford, cited by the Solicitors for the complainants. These certain persons had filed a petition asking to be made parties to the proceedings in the case, the Chancellor says, "their petition cannot be entertained. *They cannot*, in this way, *because parties to the bill*, I think, I do not speak from any over-estimate of the ability and accuracy of the late Chancellor of this State, when I say that it would require a greater array of authorities than has been produced in this case, to satisfy me that he had erred on a question of equity, law or practice. I have found nothing in this case, and the authorities cited, to lead me to believe that I am bound to follow the practice in regard to petitions of this character, that he has indicated as correct and proper; nor have, after a great deal of anxious thought and research upon this subject, been able to find in the elementary writers, or reported cases, anything to prove that Courts of Equity notwithstanding their anxiety to have all persons interested in the case before them, when they are called upon to decide, have ever devised any mode, or adopted any rule, under which the omitted parties can come in upon their own application, as parties defendant.

In addition, the allegations in the petition and the prayer therein in behalf of the petitioning stockholders, there are certain allegations in behalf of a portion of them, setting forth that the bill contains charges of fraud against them, made in such a manner as to stigmatize and criminate them improperly, and complaining in the character of Directors, and praying that "the injunction shall be at once dissolved, unless the complainant will make the criminated Directors, and among them the last named petitioners *parties to the bill as defendants*."

The complaint that these petitioners make is what is properly termed an objection, that the bill is scandalous in regard to these Directors, who are not parties. Assuming that it may be so regarded, which I by no means decide, I could not grant this prayer. The Courts have never permitted a stranger to come in as a party defendant in a cause, because the bill may contain something that he may regard as scandalous in respect to him. The most that it has ever been asked to do in such a case, is to *reter the bill for scandal* or have the offensive parts stricken out; and it is by no means settled in practice that it will do this. The inclination of the Court in such cases, is to leave the complaining party to his action for libel. I must therefore pass an order refusing the prayer of these petitioners.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int.	When Payable.	When Due.	Description of Bond.	Quot. of Bonds.	Name of Company.	Quot. of Stock.	Per Cent. of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Net Earnings.	Last Dividend.
\$1,000,000	0		1860	1st mortgage.	.....	Al x'ndria, Lon & Hamp'sr	173	6,000,000.00					
495,000	6		1862-3	2d "	.....	Androsco'g'n & Kennebec	51.53	1,400,000.00			209,475.46	110,246.98	none.
199,000	7	July & Jan.		Domestic.	.....	Atlanta and LaGrange..	86.5	1,000,000.00	139,060.00		924,122.54	172,760.74	4 pr. ct. 6m
52,646			nnw	"	.....	B'gh't, Old T. & Milford..	12.5	135,000.00	52,646.25		29,104.40	2,671.61	15,660 in '53
500,000	6		1860	"	.....	Boston & Worcester..	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m	
500,000	7		1-66	1st mortgage.	.....	Buffalo & State Line..		1,300,000.00					5 pr. ct. 6m.
300,000	7		1857-9-62	Income.	.....	"							
200,000	7		1864	Domestic.	.....	"							
577,187	6			4th mortgage.	.....	Central Ohio..	30 1/2						
192,200	7		1872	1st mortgage.	.....	Champlin & St. Lawrence	43	1,872,000.00	1,601,987.00	163,200.00	77,710.00	10 per ct.	
260,000	7		1874	2d "	.....	"							
1,140,000	7		1861-7	Domestic	.....	Ch'l'te & South Carolina.	110	1,700,000.00		291,219.86	47 per ct.	\$72,300	
1,300,000	6-7-8		1863-9	1st mortgage.	.....	Ch'go, Burl'gh'n & Quincy.	139	3,736,900.00	3,114,000.00	1,043,185.00	571,725.23	15 pr. ct. 6m	
374,000	8		1868-76	2d "	.....	"							
				Convertible.	.....	"							
1,200,000				1st mortgage.	.....	Chicago, Fulton & Iowa..	5						
532,000				2d "	.....	Cin. Wil'gh'n & Zanesville	13 1/2	1,761,149.16	2,241,500.00	221,491.96			
104,000				3d "	.....	"	25						
305,500				Income.	.....	"							
540,000	6			Convertible.	.....	Cleveland Col. & Cin.	103 1/2	4,741,321		1,329,754	700,204	6 per cent.	
43,000	7		1873	1st mortgage.	.....	Cleveland & Mahoning..	85	1,500,000.00					
400,000			1861	2d "	.....	"							
500,000	7		1873	"	.....	Cumberland Valley.....	32	1,218,300.00		160,511.56	61,101.56	\$33,250.24	
0	6		1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	32	1,000,000.00	1,000,000.00				
350,000	7			"	.....	Eastern Railroad..	93 6-10	3,243,500.00		655,578.79	288,000 7-8	\$234,133	
740,000	10			1st mortgage.	.....	East Ten. & Virginia..	120	625,450.00		30,897.50	19,694.30		
82,000	7		1869	1st "	.....	Essex Railroad..	30	700,000.00					
400,000	7		1861	2d "	.....	Evansville & Crawf'd'vle	109	2,227,657.0		243,970.42	130,601.90	\$133,221.45	
200,000	10		1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	30	3,540,000.00		681,162.52	213,837.81	3 per cent.	
				"	.....	Fox River Valley..	23	800,000.00					
100,000	6			1st mortgage.	.....	Fair Haven Branch..	13	300,000.00					\$166,240.00
100,000	6			1st "	.....	Georgia RR & Banking Co.	233	4,136,000.00		1,068,202.57	357,689.42	\$166,240.00	
300,000	7			1st "	.....	G't Falls & Conway R.R.	20	800,000.00		27,076.69	14,267.07		
4,000,000	6 1-9		1858	1st "	.....	G't West'n R.R. of Can..	281 1/2	4,191,550.00		2,068,308.00			8 pr. ct.
2,000,000			1869-70	2d "	.....	Housatonic Railroad..	74	2,000,000.00		339,196.50	176,529.97		
1,812,000			1860	"	.....	Hudson River..	144	4,000,000.00		1,924,382.44	718,037.40		
12,885,000	7		1875	3d mortgage.	.....	"	144	4,000,000.00					
4,115,000	6		1876	1st "	.....	"	144	4,000,000.00					
3,000,000	7		1876	1st "	.....	Illinois Central R.R.	135	18,453,376.00		1,476,035.27	1031,489.48	7 pr. ct.	
600,000	7		1860	1st "	.....	"	704	3,538,376.00					
700,000	7	Nov. 1.		1st mortgage.	.....	Indiana Central.....	72 1/2			354,871.00			3 pr. ct.
50,000	7	Jan. & July 1	1862	2d "	.....	"							
700,000	7			1st mortgage.	.....	Iron R.R.	13	123,700.00					
				"	.....	Kentucky Cen. 2d Div.		719,500.00					
				"	.....	Knoxville & Kentucky..							
				"	.....	Laurens (S. C.) R.R.	32	166,000.00		23,233.59	14,233.59		
				"	.....	Louisville & Nashville..	184			50,834.71	14,149.13	\$1,000	
218,000	7			1st "	.....	Lowell & Lawrence..	12 3/4	200,000.00		587,236.57	162,277.50		10 pr. ct.
1,000,000	7		1866	2d "	.....	Mad River & Lake Erie..		2,617,690.00					
1,000,000	7		1875	3d "	.....	"		2,697,090.00					
2,000,000	6			1st "	.....	"		2,697,090.00					
2,500,000	7		1868	1st "	.....	Manchester & Lawrence.	26	1,000,000.00					\$24,000
2,000,000	7		1874	2d "	.....	Marietta & Cincinnati..							
60,000	7 and 8		1867	1st "	.....	"							
40,000	8			1st mortgage.	.....	Mexican Gulf R.R.	27						
321,000	8		1881	1st "	.....	Milwaukee & Horicon..	30						
320,000	8		1 1/2	1st "	.....	Mineral Point R.R.	32						
6,000,000	6		1884	1st "	.....	"	32						
				"	.....	Mobile & Ohio..	497	10,000,000.00		251,498.96	162,802.24		
500,000	7		1869	1st mortgage.	.....	Nashua & Lowell R.R.	15	600,000.00		19,752.42	55,501.74	7 pr. ct.	
2,335,000	7	May & Nov.		"	.....	New Haven & North'm'n	55	925,500.00					2 pr. ct. 6m
8,892,600	6	June & Dec.		Con. till 1859.	.....	New York Central.....	87 1/2	23,067,400	14,763,807	7,707,348	3,009,481	3 pr. ct. 6m	
3,000,000	7		1861	1st mortgage.	.....	"							
926,000	7		1873	1st mortgage.	.....	N. Y. & Harlem R.R....	153	5,717,100.00		1,040,493.26	64,678.71	\$37,692.30	
411,700	6		1864	2d "	.....	"							
500,000	7		1863	1st "	.....	N. Y. Prov. & Boston..	50	1,58,000.00		243,713.00	51,544.40		
300,000	6			2d "	.....	N. Lon. William'ntu & Pal.	66	1,700,000.00		120,371.50			\$25,000
				"	.....	"							
				"	.....	Pontchartrain R.R.....	5	500,000.00					
				"	.....	N. O. Opelousa & Gr. West.	62 1/2	6,000,000.00		116,793.00	366,118.80	7 pr. ct.	
1,500,000	6		1873	1st mortgage.	.....	N. Y. & New Haven..	103 1/2	3,000,000.00		1,607,666.48			
1,000,000	6		1873	2d "	.....	"							
2,000,000	7		1-85	3d "	.....	North Western Va. R.R.							
1,500,000	7		1859	1st mortgage.	.....	"							7 pr. ct.
3,000,000	7			"	.....	Northern (N. Y.) R.R....	118	2,000,000.00		600,000.00			
419,200	5			"	.....	North Missouri R.R.	19 1/2			23,176.74			2 1/2 pr. ct.
221,800	6		1877	1st mortgage.	.....	Norwich & Worcester R.R.	60	2,111,500.00		304,239.23	88,458.56		
			1860	"	.....	"							
				"	.....	Ogd'nsh'g, Clay't'n & Rome	94			289,690.10	137,875.93	5 pr. ct.	
400,000	6		1866	1st mortgage.	.....	Ontario, Simcoe & Huron	83 3/4	2,937,500.00		276,939.02			
1,200,000	6		1876	2d mortgage.	.....	Orange & Alexandria R.R.							
300,000	7		1868	1st mortgage.	.....	"							
300,000	8		1873	1st "	.....	Peoria & Bureau Val. R.R.	47	1,500,000.00					6 pr. ct.
				"	.....	"							
350,000	6		1861	1st mortgage.	.....	Philadelphia & Trenton..	28 1/5	1,000,000.00					
800,000	7		1864 to 1874	1st "	.....	Portsmouth & Concord..	47						
1,260,000	6		20 years.	1st mortgage.	.....	Potsdam & Watertown..	76	2,000,000.00					
				"	.....	Rutland & Washington..	62 1/2	550,000.00		68,925.42			
				"	.....	St. Louis & Iron M'n'n R.R.	86	6,000,000.00					
				1st mortgage.	.....	Salem & St. Louis R.R.	168 1/2	400,000.00					
				1st "	.....	Sud'sky Mans'f'd & New-k	116						
				2d "	.....	Sullivan Railroad..	26	500,000.00		75,246.06	19,650.64		
				"	.....	"							
				1st mortgage.	.....	Tennessee & Alabama..	145			39,586.44			11m. 12 pr. ct.
				"	.....	Terre Haute & Richmond	73	1,294,450.00					
				"	.....	Toledo, Wabash & Western	2 1/2						
				"	.....	Troy & Boston..		1,000,000.00					
				"	.....	"							
				"	.....	Vicksburg & Jackson..	40						
				"	.....	Virginia & Tennessee..	215	3,000,000.00		322,048.60			2 pr. ct.
				"	.....	Westchester (Pa.) R.R.	31	165,000.00					
				"	.....	Wilmington & Manchester	171						
				"	.....	"							
				"	.....	Winchester & Potomac..	32						
				"	.....	Worcester & Nashua..	45 69						



# LONDON QUOTATIONS OF AMERICAN STOCKS AND BONDS.

April 17th, 1857.

Belvidere, Del., guar. 1st mort. conv. ....	@	88
Chicago & Rock Island, Mort. conv. 1858, ..	"	"
Cin. Ham. & Dayton, 2d mort. ....	"	80
Detroit & Milwaukee, 1st mort. conv. till 1865, ..	66	69
Erie, 3d Mortgage, 1863, ..	83 1/2	84 1/2
" Sinking Fund, ..	83	85
" conv. 1862, ..	73	78
Grand Trunk (Canada) Debenture, ..	79	90
Great Western " conv., ..	23	128
" " non-conv., ..	106	108
Illinois Central, 1st Mort., 7 1/2, ..	91	92
" " with option 70 per cent. shares till Jan, 1858, ..	106	108
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	86	88
Little Miami 1st Mort. not conv. 6's, ..	"	"
Marietta and Cincinnati, 1st Mort., ..	"	"
Michigan Central, conv. 8's, 1860, ..	90	92
do do do 1869, ..	90	91
N.York Central. No Mort. Not conv. 6's 7/2, ..	92	93
" " conv., 7's, ..	93 1/2	91 1/2
Ohio and Mississippi, 1st Mort., ..	"	"
Ohio and Pennsylvania, Income 1872, ..	68	70
Panama. No mort. conv. 1866, ..	"	"
Peunsylvania, 1st Mort., conv., ..	88	90
" " Sterling, 2d Mort., ..	91	93
Steuenville and Ind., 2d Mort., ..	"	"

The quotations given are sterling quotations. The American values to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE

AND AT PRIVATE SALE.

BY HEWSON & HOLMES.

For the week ending May 6, 1857.

BONDS.

5,000 Indianapolis & Cincinnati R. R. 7 per cent. 2d Mortgage Bonds, ..	80
2,000 Little Miami R. R. Co. 6 per cent 1st Mortgage Bonds, ..	80
1,500 Marietta & Cincinnati R. R. Co. 7 per cent. Domestic Bonds, ..	40
3,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. bonds, ..	60
8,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds, ..	67 1/2
11,000 Indiana Central R. R. Co. 10 per cent. Income Bonds, due in '58, ..	95
1,000 Indiana Central R. R. Co., 7 per cent. 1st Mortgage Bond, ..	80
2,000 Clark Co. Ky. 6 per cent. Bonds, ..	70
1,000 Cin. Ham. & Dayton R. R. Co. 7 per cent 2d mort. Bonds, ..	82 1/2
700 Little Miami R. R. Co. Dividend Scrip. of Dec., 1856, ..	82
500 Ohio Central R. R. Co. 7 per cent. 4th Mortgage Bonds, ..	30

STOCKS.

250 Shares Cincinnati & Chicago, ..	3
20 " Ohio and Miss., ..	12
100 " Little Miami, ..	96
74 " Columbus & Xenia, ..	93
81 " Indianapolis and Cin., ..	95
40 " Cin. Ham. & Dayton, ..	69
25 " Cov. & Lexington, ..	19 and int.
100 " Bellefontaine & Indiana, ..	25
119 " Dayton & Western, ..	20
22 " Marietta and Cin., ..	20
50 " Southern Pacific, ..	\$3 1/2 for \$5 paid.
10 " Farmers' Bank Ky., ..	120
5 " Ohio Life Ins. & Trust Co. Bank, ..	98

## MONETARY AND COMMERCIAL.

The market during the week has been rather more stringent than at last dates, in consequence of the payments of the 1st and 4th, which came on during the week. The demand has therefore been greater. Eastern exchange, that index of the relative supply of currency and the wants of the business world, remains steady at our last quotations—3/4 buying and 1 per cent. premium selling rates. New Orleans is quoted at 1/2 per cent discount buying and par selling.

As we advance in the season the wants of our merchants will be less, and we look for a consequent quiet in the markets for money and exchange. This prospect, and the favorable weather for farmers, gives us better hopes of the future than the long continued stringency in the markets would otherwise warrant.

The Lake Erie & Wabash R. R. Co. has failed to pay

the spring interest on its second mortgage bonds in consequence of the failure of the Illinois Great Western R. R. Co. We hope to see this disgrace soon wiped off the company.

At the East we note a cheerful tone in the money articles. The demand appears to be less than the supply, and rates favor the borrower. Stocks are duller than at last dates, and we notice less speculative tendency than before noted. The New York papers are mooted the question of a reform in the operations of the Stock Board. Such a thing has been needed for a long time and it must be brought about, or the influence of the Board must be lost.

Hewson & Holmes, in their circular, say:

There has, in the present week, been an active demand for leading railroad securities, at last week's prices. In Little Miami shares the sales have been liberal at 96, at which price the market closes very firm. It is generally expected that this company will soon declare a dividend of 5 per cent out of the earnings of the past six months. Hamilton & Dayton shares are held firmly at 69, with sales at that price. The annual report of this company was read to the stockholders at their meeting on the 4th inst., showing the gross earnings for the previous year to be \$555,709, being an increase of \$47,437 over the previous year. The affairs of this company are represented in a highly flourishing condition, and their future prospects every way encouraging. Indianapolis & Cincinnati shares are dull, and sales are not readily made at our quotations. The only sale we have to report is one of 81 shares at 64. Transactions in fancy stocks have been very small, at prices of last week.

In bonds we report about the usual amount of sales, principally at previous prices. The amount of good securities of this class on the market is very small, large amounts having been taken out of the market in a quiet way in the last sixty days, for permanent investment.

Money matters are slowly but steadily working easier; they are, however, still sufficiently stringent to satisfy outside dealers in paper.

Exchange on New York is 3/4 to 1 per cent. prem. New Orleans 1 1/2 discount to par.

SALES AT THE NEW YORK STOCK BOARD—May 2.

\$1,500 Virginia 6's, ..	91 1/2
500 California 7's, 1875, ..	48
1,000 N. Y. Cent. R. R. Ss. Bonds, ..	82
5,000 Erie Railroad Bonds, 1875, ..	87 1/2
3,000 Erie R. C. Bonds, '71, ..	76
2,500 Illinois Central R. R. Bonds, ..	99 1/2
1,000 Illinois Cen. Freeland Bonds, with priv., ..	94
3,400 Terre Haute and Alton 2d mort. Bonds, ..	69
2,000 Lake Erie W. 2d Mortgage, ..	69
1,900 L. C. & M. & R. R., ..	86 1/2
250 shares Harlem R. R. stock, ..	16 1/2
510 " New York Central, ..	87 1/2
1850 " Erie, ..	42 1/2
150 " Hudson River, ..	25
120 " Panama, ..	94 1/2
200 " Mich. Cent., ..	95 1/2
100 " Mich. S. & N. Ind., ..	65
175 " Illinois Central, ..	135
130 " Cleveland & Pittsburg, ..	51
50 " Galena & Chicago, ..	111 1/2
100 " Cleveland & Toledo, ..	67
225 " Chicago & Rock Island, ..	99
50 " Milwaukee & Mis., ..	70 1/2
10 " LaCrosse & Milwaukee, ..	79
100 " Reading, ..	81 1/2

CHILLED WHEELS AND TIRES.—Messrs. Bush & Lobdell, of Wilmington, Delaware, manufacture chilled wheels and tire for locomotives and cars. Those using this class of wheel will find their advertisement in another column.

IRON FOR SALE.—Our readers in want of iron will find in our columns an advertisement of 2000 tons for sale, by Messrs. M. K. Jessup & Co., of New York. The iron is of Erie pattern.

## BALTIMORE & OHIO R. R.

This road has recently been made the scene of one of the most disgraceful strikes that has ever occurred—the more so because it has been raised by a class of men whose self-respect and intelligence should have dictated a wiser course.

A desire on the part of the Directors to protect more effectually private property from the depredations of pilferers, while in transit over the road, lead to the adoption of the following order, which was passed April 15th:

"Resolved, That the Masters of Transportation and Machinery be instructed to cause all cars containing merchandise to pass over the whole or any part of the road, East or West, to be sealed in such manner as to accomplish the object desired, and that the officers at all stations despatching trains shall be directed to seal each car, and require from each conductor taking charge of the same, a receipt for the cars so sealed, and that said conductor, in transferring said cars, shall take a similar receipt from his successor in charge, and each officer at points of delivery shall report the numbers of any cars on which the seals may be broken, and that the officers in charge of such cars as may have broken seals, other than from unavoidable accidents, shall be responsible for any loss from said cars, and shall be immediately discharged from the service."

In obedience to the above resolution the Masters of Transportation prepared the necessary Receipt Book, and gave notice that the order would take effect on Monday, April 27th.

The freight conductors remonstrated against the order, and demanded that it should not be enforced. In reply to this the President and the Master of Transportation said they could do nothing till the meeting of the Board, but promised to lay the remonstrance before the Board at its next meeting. Here the matter should have rested till the proper authorities could decide. This course however, did not please the conductors, and they resolved to strike and impede the running of the trains. They raised mobs and attacked the trains especially in the neighborhood of Mt. Clare. The authorities of the road determined to pursue its legitimate business at all hazards, and the Governor of the State has issued a proclamation warning all uninterested persons to keep away from the seat of difficulties, and calling on the citizens to aid in the maintenance of good order. This will deprive the rioters of the imaginary support of a crowd.

This is the most disgraceful and unjustifiable STRIKE that has occurred for a long time, and we trust that the arm of the law will prevail over the mobocratic violence of the few disaffected men, who have undertaken to impede the business of this important channel.



**SOUTHERN PACIFIC RAILROAD.**—We learn from the New Orleans papers that a meeting of the Directors of this Road was held in that city on March 27th, the proceedings of which will be deemed interesting to all who hold stock in the Road. The resolutions were adopted unanimously, and declare themselves to be a portion of a contract for the sale of twelve millions of the five per cent. stock of this company at the south. They also provide that on the disposal of as much of this issue of stock as will pay into the treasury \$300,000 in cash, the office of the company, with all its books, papers, etc., shall be transferred to New Orleans, and that four Southern Directors shall be chosen in place of four of the present Northern Directors. It is also provided that the bonds of the company may be issued when necessary for the construction of the Road, but they shall convey no individual liability to the stockholders.

The effect of the above resolutions will be to place the control of this important enterprise at New Orleans. Mr. Allen, the President of the Board, resigned, and Mr. Geo. S. Yerger was elected to fill the place. Mr. Yerger has issued an address to the public, in which he states his conviction that the charter of the company gives it land enough to build its line and leave an ample surplus. —*Baltimore American*.

**TRUSTING TO ONE MAN.**—We have long raised our voice against trusting the management of great Companies to one man. However honorable or honest he may be, it invests him with far too much power for those who have to work with him, and generally for the interests of the undertaking. In him is centered the whole knowledge, and therefore the whole power, over the concern. No one can keep him in check because no one knows so much, if any thing, of the business. The officers and servants are all at his beck and command, for they know that he alone has the control of their duties and places. The other Directors, if he is a managing Director, or the whole board of Directors, if he be the sole manager, they look on and regard as what they are, so many dummies. Whatever the sole manager says or does is right, what the Directors say goes for nothing. In fact, putting too much power under any man is wrong; it makes him the dictator of the Company, the only significant digit, and reduces all the others to mere ciphers. If he be ever so honest it is enough to pervert him, and if he be not quite perfect he is sure to fall sooner or later, and probably involve the Company in serious misfortunes.

Look what has occurred in the North of Europe Steam Navigation Company, whose direction contains so keen and experienced a man as Sir Morton Peto. There, by trusting the management in one man, the Company has been involved in a loss of one-tenth of its capital, and was deluded into paying dividends at the same time it was losing considerably. By trusting entirely to Captain Andrews, while Sir Morton Peto and his colleagues in the direction were hugging themselves in the belief that they possessed an excellent property, their capital, and that of their copartners too, the Shareholders, was rapidly melting away.

Here was a concern, it is true, which one man might easily have managed, but the love of place or power morbidly affected the manager's mind, and he sank into deception and misrepresentation.

We do not say anything of Cameron of the Royal British Bank, who appears to have been constitutionally a canting rogue.

In the Vale of Neath railway, also, it seems the entire management is entrusted into the hands of one, and though there is a board it would appear that Mr. Joshua Williams is the all in all. Mr. Williams is doubtless a man of the highest integrity, but on principle we object to the management being in the hands of one man. This too, we believe, is the opinion of some of the largest Vale of Neath Shareholders.

Indeed it is bad policy, and unjust to the individuals, to thrust too many offices upon them. In ordinary affairs, we find that labor is never so well, and, indeed, so cheaply done, as when properly divided. Do we not see it in the shoe trade, the watch trade, and others? Nothing has contributed so much to perfection and economy as the division of labor. A man cannot have his mind distracted by a number of different things, and do each well. And if division of labor is found beneficial in so small a matter as the making of a shoe or of a needle and pin, how much more would it be in larger and more extensively ramified affairs.—*Herapath's Journal*.

**GRAND TRUNK RAILROAD COMPANY.**—A bill has been introduced into the Canadian Parliament for the relief of this company, which provides that the following charges shall be paid out of the revenue of the company before any claim shall be made on the part of the Government.

1. "All expenses of managing, working and maintaining the works and plans of the Company.—2 The rent of the Atlantic and St. Lawrence Railway, and all the interest on the Company exclusive of those held by the Province a dividend of six per cent. on the paid up share capital of the Company, in each year in which the surplus earnings shall admit of the same and then in each year in which there shall be a surplus over the above named charges, such surplus shall be applied to the payment of the interest on the Province Loan accruing in each year;—The bonds and share capital herein mentioned shall be held to include and consist of all loans and paid up capital which the Company have raised or may hereafter raise *bona fide* under the authority of any Act of the Provincial Legislature passed or to be passed, for any such purpose authorized by any such Act."

## TO PRINTERS.

### Large Cylinder Hoe Press FOR SALE.

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once. Address  
WRIGHTSON & CO.,  
167 Walnut street, Cin'ti, Ohio.  
N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.  
ap8-1m W. & CO.

## FOR SALE.

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address  
WRIGHTSON & CO.,  
167 Walnut street, Cin'ti, Ohio.  
ap8-1m

## Railroad Iron.

2000 TONS RAILS, Erie pattern, weighing about 56 lbs. per yard, in port and to arrive; for sale in lots to suit purchasers, by  
M. K. JESUP & CO.,  
44 Exchange Place, New York.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

## BUSH & LOBDELL,

Wilmington - - - - - Delaware.

MANUFACTURERS OF

## CHILLED WHEELS

AND

## TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

## W. G. HYNDMAN'S



## Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

G. W. MORRILL.

G. B. BOWERS.

## MORRILL & BOWERS,

(Successors to and members of the late firm of C. W. ALSON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.  
ap16



# The Great Arnold Seer (1 Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **WRITING**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

**JAMES J. BUTLER, Agent.**—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—**JAMES H. MORLEY**, St. Louis, Mo.  
ap8 Or **SUMNER SMALL**, Boston, Mass.

## Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

**CHARLES ELLET, Jr., Civil Engineer.**

No. 298 H Street, Washington, D. C.

ap12

## Thorough Bred Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

## SHORT HORN BULL,

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

T. WRIGHTSON.

## SILVER, GOLD, LEAD,

And Other Minerals,

ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the **SONORA EXPLORING AND MINING CO.**, of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of this enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

**EDGAR CONKLING, A't** for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

## Norris' Locomotive Works.

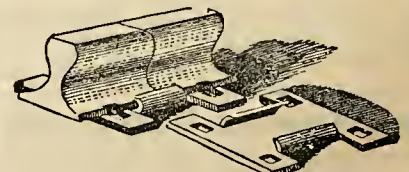


PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
jy 27. **RICHARD NORRIS & SON.**

## RAILROAD SPIKES.



WROUGHT IRON

## Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, **HOOK & FLATHEAD R. R. SPIKES**, of all Patterns, **WROUGHT AND CAST CHAIRS**, and **FASTENINGS, BOILER RIVETS, BOLTS, SHIP AND BOAT SPIKES, &c., &c.**

The best quality of refined iron is used, and all orders filled with despatch. **J. HOPKINSON SMITH**

No. 25, South Charles

Please direct the name in full,  
Baltimore August 31—f

## ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

## Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets.

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

**RAILROAD AND OTHER BLANKS.**  
Printed to order in the best manner.

**Ruling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

**ANDERSON, GATES & WRIGHT,**  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

## Union Works, Baltimore.

## POOLE & HUNT,

## Iron Founders & General Machinists,

**ARE** prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

## Steam Engines of any Size.

**PLATE CAR WHEELS** and **CHILLED TIRES** equal to any produced in the country.

**WHEELS AND AXLES** fitted for use.

**HYDRAULIC PRESSES** for pressing Oils and for other purposes.

**MACHINERY** of the most approved construction for Flouring and Saw Mills.

**GAS HOLDERS** of any size, and Machinery and Castings of all kinds for Gas Works.

**STEAM BOILERS** and **WATER TANKS** of any size or description.

**SHAFING, PULLIES and HANGERS.**

**WROUGHT IRON PIPE** and **FITTINGS** constantly on hand, and fitted up to order.

ap 3



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12:30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

ON THURSDAY, Aug. 14th, The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago. Trains will leave Clinton at 6:30 A. M. and 12 M., until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton

At 10:30, A Steamer leaves Racine for Chicago every evening at 10:30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President,  
ROBERT HARRY, Ass't Sup't.

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

### MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Rawdon, Wright, Hatch & Edson,

### BANK NOTE ENGRAVERS AND PRINTERS.

Isso, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEW & LEAVITT

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 200 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
aj r2 Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,

PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars.

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Glube and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Curds and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jacket Bands, &c., &c.

### Steam and Water Gages,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED.  
oc23-1y

## E. MENDENHALL, MAP, BOOK & PRINT SELLER,

Has constantly on hand GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES  
DRAWING INSTRUMENTS, &c.  
Publisher of the

Railway Map of the Western States,  
In Sheet and in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON CO. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA  
MAPS OF EVERY DESCRIPTION.  
mh22

## Important to Railroad Companies, etc.



### Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

### RAILROAD FROG-POINTS,

Lathe Mandrels, Gauges of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also, be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

### ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description.

While under construction. AGENT FOR THE PURCHASE of, on commission all articles required for Railroads. Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOY'S METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

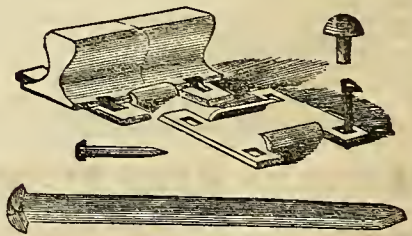
Also, for Water Gages, Indicators, Steam Whistles CHAS. W. COPELAND, Consulting Engineer, 64 Broadway, N. Y.

## W. G. ATKINSON, Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD. RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mal-ly

## GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio. Please direct name in full.

Feb 28

COREY, GOSS, & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FRIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODS, Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent, jnl10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE &amp; CRAWFORDSVILLE, and the TERRE HAUTE &amp; ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

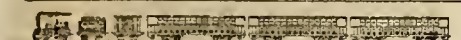
## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK, Sup't Terre Haute &amp; Richmond R. R. ap10



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

us23-2m CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jyl7

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent. Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L Office No. 2 Burnet House.

Jan2

1856.

1857. Spring Arrangement. 1857

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD. FOR THE NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Duquaque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

## NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

## "STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connerville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Hontsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburgh, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburgh Philadelphia, &c. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M. For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Laayette.

Passengers coming South from T., W., & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

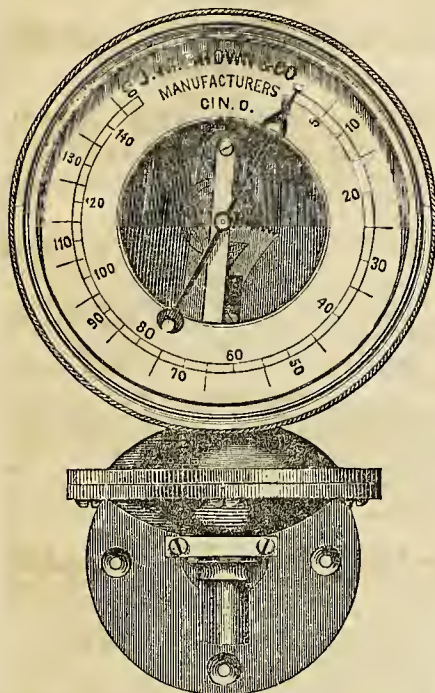
L. N. ANDREWS, Gen. Frtght. Ag't.

Indianapolis, Sept. 16, 1856. [mh29-1y,



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR

### LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

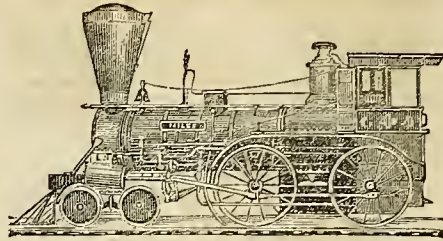
### DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, Conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tug-cars.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for Iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1855. 9 South William Street.

### A. B. LATTA'S

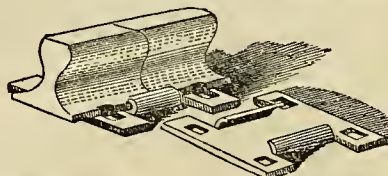
## Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

ap17 A. B. & E. LATTA.  
J. D. GREEN, C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

south Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.  
Feb. 14 1y J. B. GREEN & BRO.

## THE SCHENCK MACHINERY DEPOT

AND

### Leather Banding Manufactory,

No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

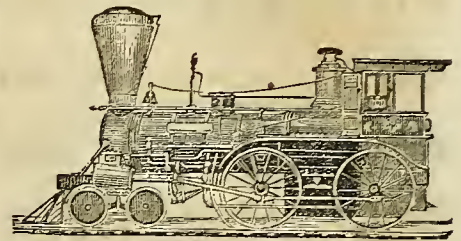
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS.

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

### Cotton Duck for Cr Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Bells. Brass  
and Iron Wood Screws. Brass and Silver plated Trim-  
mings for windows and Seats. Varnish, Coach Japan  
and Glue; Palms, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Bagges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.  
+oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

## SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, &c. all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

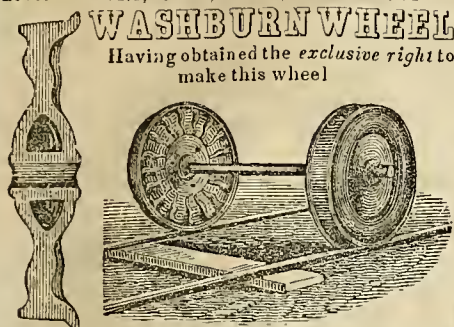
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855 1



### FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



#### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

#### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

#### WASHBURN WHEEL.

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**  
We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed  
DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... G. M. RUSSELL  
**DAVENPORT, RUSSELL & CO.,**  
**Railway Car Manufacturers,**  
**MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 16<sup>th</sup> JOSEPH DAVENPORT.

### S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 u2† NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

**ALBERT N. LEA,**  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES

NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55 3 College Hall, Cincinnati O.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July 31

**THOMAS D. STETSON,**  
**Mechanical Engineer,**

AND

**AMERICAN AND FOREIGN PATENT AGENT,**

No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

aug14 ly P. DUDLEY, President of the Board.

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y. feb19-1m

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** no13 10 Wall st., near Broadway, New York.

### IRON BOILER FLUES PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of

**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA. [aug]

### RAILROAD IRON.

**LOCOMOTIVES.**  
4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb 7, '56-2m.] A. H. GOODMAN & CO.,  
no. 7 Wall st., N.

### RAILROAD CAR

AND

### COACH TRIMMINGS.

### DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

### IMPORTERS

OF

**Plain and Figured Mohair Plush;**  
Printed & Unent do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**

**Enameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width.**

Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

### PATENT FELT.

FOR CUSHION & MATTRESS FILLING  
N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON.

### RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Conper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1866.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 2nd street, N. Y.

**T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.**

**Patent Self-Adjusting Lantern!**  
THE MOST APPROVED LANTERN FOR  
**RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened, the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGWAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

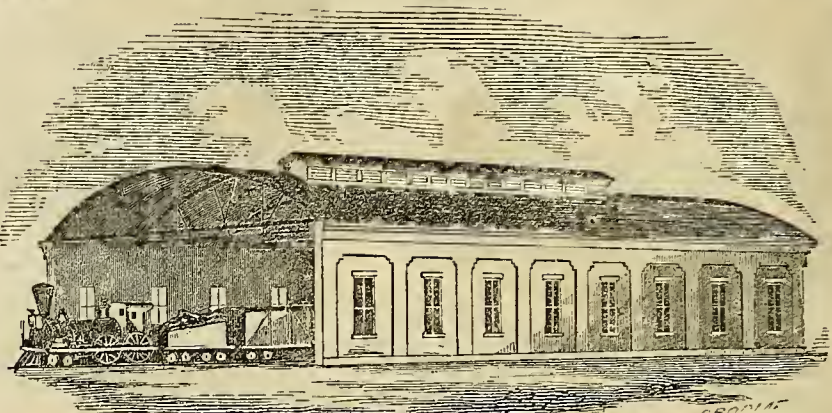
BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan8-ly 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



**Office, No. 57 West Third Street,  
CINCINNATI, OHIO.**

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of iron supporting now in use, and no more than good wooden trusses; besides, this plan of roofing gives a fine architectural appearance, is all iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

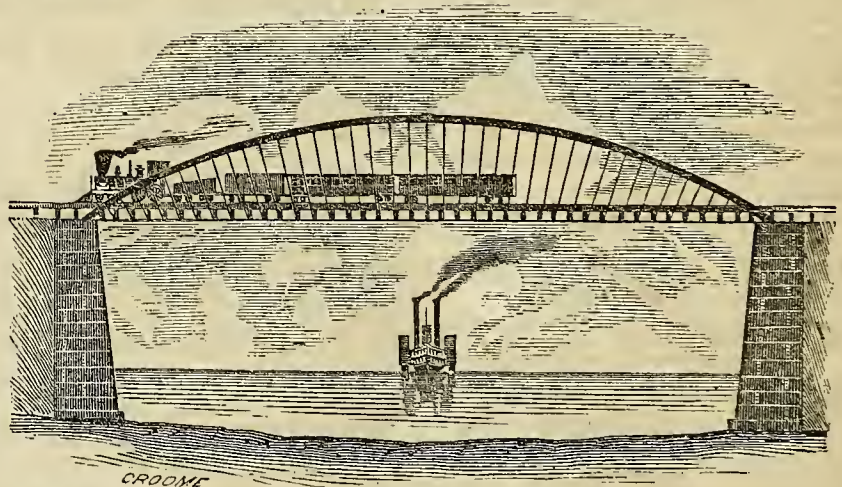
MOSELEY, WINSTON & MOSELEY.

January 1st, 1856.

JOHN BANDON & CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



**Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.**

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or supporting parts, being *lute iron triangular tubes*. Including the wood work or floor, the Bridge will bear, when wet made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great, and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by responsible obligations.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

**THOS. W. H. MOSELEY.**  
Principal Superintendent and Engineer.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON,

CINCINNATI:

THURSDAY MORNING,.....MAY 14, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS—	
One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00
Cards not exceeding 4 lines, \$5 per annum.	
Subscriptions and communications addressed to	
WRIGHTSON & CO.,	
Publishers, and Proprietors,	

### CONTENTS.—NO. 12.

#### EDITORIAL.

Trade of the United States with British America—	
Its Importance .....	177
The Galveston News and the Pacific R. R. ....	177
Brevities .....	177
Baltimore & Ohio R. R. Strike .....	185

#### RAILROADS.

Indiana Central R. R. ....	178
Illinois Southern R. R. ....	181
Sunbury & Erie R. R. ....	182

#### MISCELLANEOUS.

Railroad Companies .....	179
Ottawa & Lake Huron Canal .....	183
Grassi's Screw Locomotive .....	186

#### MONEY AND STOCKS.

Table of Stocks and Bonds .....	184
London Quotations .....	185
Cincinnati Stock Sales .....	185
Monetary and Commercial .....	185
Sales at the New York Stock Board .....	185

### BREVITIES.

—CINCINNATI, HAMILTON & DAYTON R. R.—

Daniel McLaren, Esq., has been elected Superintendent of this road, in place of H. O. Ames, resigned. Mr. McLaren has long been in the employ of the company in important positions.

—LEXINGTON & DANVILLE R. R.—There was

a meeting of citizens of Cincinnati favorably disposed to this road at the Merchants' Exchange, on the evening of May 12. General Coombs was present and made a short speech. Track-laying is progressing, and the road will soon be completed to the Kentucky river.

—NEW ORLEANS & OHIO R. R.—The President

of this road has just purchased the iron and rolling stock for the road. The work is progressing.

—HOUSTON & TEXAS CENTRAL R. R.—This

road is progressing. Fifty miles are graded and thirty-three in running order.

—HARRISBURG & BUFFALO & BATON R. R.,

TEXAS.—Thirty miles of this road are laid and twenty-five under contract.

—CAMDEN & AMBOY R. R.—This company

has declared a stock dividend of 20 per cent., payable on the 20th inst.

### TRADE OF THE UNITED STATES WITH BRITISH AMERICA—ITS IMPORTANCE.

The connections of the United States with British America are yearly growing more important. This is particularly so with all the Northern States. The railroads of the United States now connect with those of Canada at Quebec, at Montreal, at Niagara, and soon will at all the ports of the Northern Lakes. Besides this, British America, particularly Canada, is rapidly growing. Its towns are building up, and its trade is flourishing. Let us look at the magnitude of British America: Surface, 3,003,814 square miles; population, 2,786,466 inhabitants. Of this vast territory—large enough for *sixty States* of the size of New York—the only populous parts are Canada, Nova Scotia and New Brunswick. The elements of these are:

	Square Miles.	Population.
Canada East .....	291,889	890,261
Canada West .....	147,332	952,004
New Brunswick .....	27,700	193,800
Nova Scotia .....	18,746	276,117
Aggregate .....	485,767	2,312,182

It is true that this gives only 5 persons to each square mile; but the Canadas are increasing fast, and our commerce with them, especially since the Reciprocity Treaty, is very great.

The following are the reports to these several provinces at an interval of twenty years:

	1836.	1856.
Exports from United States ..	\$7,406,433	\$29,705,392
Imports .....	1,937,717	21,310,421

It will be seen that this trade is very favorable to United States; for our exports largely exceed the imports.

The business of the Canadas is chiefly done at three ports—Quebec, Montreal and Toronto. The exports and imports of these places in 1855 were as follows:

	Imports.	Exports.
Quebec .....	\$ 2,930,324	\$6,234,808
Montreal .....	12,256,244	1,902,600
Toronto .....	5,605,816	1,616,420
	\$20,792,384	\$9,753,828

It is here seen that these three cities do the largest part of the commercial business of British America; but this will not always be so. It was but a short time since Toronto was but a small town, but now it is a commercial city. In a little while great cities will rise on the north shores of Lakes Huron and Superior. These will be connected with the United States, and it is not improbable that the future will see almost as rapid and powerful development of the Canadas as of any part of the United States.

There are many physical features in the Canadas favorable to its growth. The country is not mountainous; a table land divides the Ottawa from the St. Lawrence; and that west of the St. Lawrence, towards Lake Huron and the Georgian Bay, is a yet higher table land. The highest elevation of these ridge plains is only 350 feet above Lake Huron.

The Canadas are supplied with the best and most abundant water courses. The whole

chain of the Northern Lakes lie adjacent to them, besides several very considerable lakes which lie within the interior. The great rivers St. Lawrence, Ottawa and Montreal flow through it.

The climate is a northern one, but is seldom very severe. It is said to be equable and comparatively mild. The agriculture of Canada has advanced with much activity. The following are the products of Canada staples, viz:

	Bushels.
Wheat .....	12,692,582
Oats .....	11,193,844
Potatoes .....	4,969,475
Peas and Beans .....	2,873,354
Barley .....	635,875
Rye .....	479,651
Corn .....	1,696,513
Breadstuffs .....	44,551,334

This is a very large amount of produce for Canada West, which at that time contained only a million of people. With this amount of grain it could well afford an export of *ten millions* of bushels, which will enable it to purchase many articles of manufactures which are not made there, but which the United States can readily furnish. Looking to that immense but now sparsely inhabited tract which spreads over British America and below the 55° of latitude, we must believe that the time is near at hand when that country will be the object of extensive emigration, and be settled by millions of thriving people. Then the shores of Lakes Erie, Huron and Superior will be lined on the British side with great cities and marts of commerce. Sooner or later this must be the case; and it is in view of this that we present these facts to show what the commerce with British America will be, when we take the present commerce as a basis to estimate what will be then.

### THE GALVESTON NEWS AND THE PACIFIC RAILROAD.

The Galveston News of April 21 has the following:

THE SOUTHERN PACIFIC RAILROAD.—We copy the following extract from the Railroad Record of Cincinnati, in allusion to the change that has been made of late in the Directory, in order to operate more effectually in the South:

"It is due to Cincinnati to say that she has furnished more substantial aid to this great enterprise than any other part of the Union. It was Ohio that furnished the enterprising gentlemen who assumed the responsibility of carrying forward the work at a time when no one else would give a passing thought to this great project; and to Ohio it is due that the company has thus been able to fulfill the requirements of their charter, and save from forfeiture one of the most liberal charters ever granted by a Legislature. And yet Ohio has not a single representative in the Board of Directors which control this road. How long the people of Ohio will be willing tamely to submit to this, remains to be seen. For ourselves, we unhesitatingly say it is an outrage on justice and courtesy."

The Record is, doubtless, correct in the statement that this enterprise was originated, and has had its chief support in Ohio. The Record itself has been its organ and eulogist up to a late period. But this patronage seems now to



be transferred to some of our New Orleans contemporaries. It doubtless pays well; but the Record, having probably received a liberal share of the \$1,574,790 expended under the head of *agencies and incidental expenses*, ought now to be willing to allow some of its Southern contemporaries to come in for their share, both of the cash and 5 per cent. stock. The Record should also bear in mind that during the domicil of the company at the North, it has issued nearly half of all the stock the charter allows—that is, the charter allows stock to the amount of *one hundred millions of dollars*, nearly half of which has been issued before this change of domicil to New Orleans. It is, therefore, reasonable to suppose that the North has already had its full share of the spoils, and these complaints of the Record are consequently in bad taste.

The above is as barefaced a misrepresentation of facts as we have ever seen. The remarks quoted from the Record were made nearly a month previous to our knowledge of the change in the Directory, and two weeks prior to the change itself. Had the writer in the *News* read the article from which he quoted, he would have seen that it was a simple notice of the completion of the grading of the first ten miles of the road bed. And had he read our subsequent issues, he would also have seen that we were in no wise opposed to the "*change in the directory*," of which he speaks. His statement of our motives and the facts of the case is, therefore, a misrepresentation.

The *News* patronisingly asserts that "the Record is doubtless correct in the statement that this enterprise was originated and has had its chief support in Ohio." The Record never made any such assertion, and the assumption of the *News* is based on the sheerest ignorance and effrontery. The Texas Western R. R. received its charter and its munificent grants from the State of Texas, and these grants were given to Texas men, but *they* were too pusillanimous to avail themselves of this sovereign bounty, and for a paltry sum, sold their inheritance to others. If the parties to whom those Esaus of Texas sold their birthright were no better than themselves, it is no fault of ours—we had nothing to do with the purchase, and we presume what galls the Editor of the *News* so much is, that *he* had nothing to do with the *sale*. After the sale, it was held principally by New York men, its office was in New York, and it was controlled by parties living there, at least until the recent change to New Orleans, if that change is yet perfected. Perhaps the *News*, in its *truth-telling spirit*, can tell; we cannot.

All that Ohio ever did was to give substantial aid for building the most important enterprise now before the world. The *News* therefore makes a slight error when it states that this road was *originated* in Ohio. It would have been fortunate for this road, fortunate for Texas and fortunate for our country, had Ohio originated and controlled this Company. The road itself would have been in a far different condition, and the constant bitter, and interested opposition of the *News* have been disarmed. The motives for this opposition are as transparent and selfish as its course has been unwise and recreant to the true interests of Texas. The *News* has but one eye, and that sees Gal-

veston as the commercial centre of the world. Like a pin head held before the pupil of the eye, Galveston in the eye of the *News* dims its vision of the whole world beside, and it is its decided opinion that if the trade of the world does not centre there, it ought to. Hence every scheme of improvement that the Legislature of Texas has devised for the development of its whole territory, that does not terminate at Galveston, meets with disfavor from the oracle of the *News*. That such a course is as unwise as it is selfish, is palpable to every one but the *News* itself.

The *News* for want of argument undertakes to bolster up its cause by contemptible insinuations as to our motives in advocating the early construction of a Pacific R. R. Like its other statements this is also a misrepresentation. We have believed and still believe, that a Pacific R. R. is the present great want of our country as a whole. It is needed to bind our eastern with our far western possessions. It is needed to give an avenue for commercial and social intercourse between the Atlantic and Pacific coasts, safe from tropical fevers, ocean storms, Isthmus mobs and the attacks of enemies in case of war. It is demanded by every consideration of national policy and pride, and it is to-day loudly called for by the voice of our whole people. The Record has believed this, and has unhesitatingly said so. We have also believed that the favorable grades and low summits on the southern route offered the earliest prospect of its accomplishment on this line. And we have believed and said that the liberal charter and immense land grants of the Texas Western R. R. afforded a basis for the safe and rapid construction of this great national artery by honest and capable men. This is the extent that we have gone, and if the Galveston *News* had pursued a course as little selfish and sectional as ours, it would have been more creditable to its patriotism and intelligence.

With regard to the issue of stock in the Texas Western R. R., we do not hold ourselves responsible. The stockholders had this under their own control in October last; that was the first election of officers held since we have known anything of the company. We attended the meeting in New York, and there claimed for Ohio a voice in the directory. The stock, as represented on this occasion, controlled the election, and selected the following board:

Horatio Allen,	New York.
F. M. Dimond,	Rhode Island.
T. Butler King,	Georgia
R. M. Stratton,	New York,
George D. Post,	"
R. J. Walker,	"
Edwin Post,	"
Michael G. Bright,	Indiana.
Samuel F. Butterworth,	New York.
R. T. Archer,	Mississippi.
Gen. Wm. Cook,	New Jersey,
Menry McFarlane,	"
C. S. Dickerson,	"
Wm. T. Scott,	Texas.
M. J. Hall,	"
J. P. Henderson,	Texas.
W. R. D. Ward,	"
Dr. J. Taylor,	"
C. S. Todd,	"

At the time of the election, it was distinctly understood that but twenty-two millions of the stock of the company was issued—that on much of that but two and a half per cent had been paid in, and not one word was said about rescinding the resolution of a previous meeting of the stockholders, limiting the issue of five per cent stock to twenty-five millions of dollars. For any excess of stock issued above that sum, we trust the stockholders will hold the directory as above constituted personally responsible. And we will add, that if the course of these directors has dimmed in the least the prospects of this great national enterprise, if through inefficiency or any other cause they have during the last six months allowed this great enterprise to become trammelled and impeded, great will be the measure of accountability that they must render for the trust that has been reposed in them.

In conclusion we would say that we have advocated the enterprise entirely on its merits. Had it been our province to select a route for the especial benefit of Cincinnati, we might have chosen a different road. But nature has placed here the great passes in her lofty chains of mountains, through which the Pacific R. R. must go. Texas has given such encouragement as she was able to give to this project, and it would be wise in the Galveston *News* to lay aside its petty jealousies of route and termination and advocate the speedy construction by honest and economical management of such routes as will benefit its State and country at large. Let it lift its voice in favor of integrity in carrying out this great scheme in a straight forward honest manner, rather than condemn the whole plan because its terminus is not at Galveston Bay.

—PACIFIC MAIL STEAMSHIP Co.—This company has declared a semi-annual dividend of 10 per cent.

#### INDIANA CENTRAL R. R. CO.

The Fifth Annual Report of this company has been furnished to us by the officers of the company. The following is the statement of earnings for the last three years:

Earnings 1854.....	\$321,400 06
" 1855.....	350,160 10
" 1856.....	434,004 29
Increase from 1854-1855.....	28,760 04
" 1855-1856.....	83,844 19
Or over 23 per cent. in one year.	

The net earnings of the road have been as follows:

Gross earnings.....	\$434,004 29
Expenditures.....	184,435 93
Net earnings.....	\$249,568 31

The expenses of the road have thus been 42 per cent. of the earnings.

The report of the President says:

"Our road bed has been kept in good condition during the year just closed, and our rolling stock has been kept in good repair, and has been found sufficient for the business of our line, and our proportion of the through business, though from an unusual amount of



freight suddenly pressing at one or two periods, and a deficiency of rolling stock on some of our connecting lines, we were unable to do all the business that offered, and our freight earnings have suffered a considerable diminution in consequence. These difficulties have, to a large extent, been removed, and we hope the present year will find the lines east and west better prepared to meet any such emergencies that may again occur.

"Our passenger service has been very satisfactorily performed, and its earnings gratifying. The increase of travel over our route and the earnings have verified our opinions given in our last annual report, and it gives us great pleasure to be able to say that no accident of any description, resulting in personal injury to any passenger, has occurred during the year. Nor has any accident occurred in our passenger or freight service, resulting in any material injury to engines or cars. This shows a most commendable vigilance and faithful performance of duty in our operatives and those having charge of and the superintendence of the line and of the machinery.

"During the past year we have made valuable improvements at Indianapolis in finishing our freight house and filling up and graveling the yard adjacent to it and the yard for standing cars, and in sinking the well at our engine house and placing a steam pump in it to supply water to the tanks for the engines.

"We have built a large wood shed at Philadelphia, and sunk a well and erected a water station there, and have covered and enclosed the bridges across Sugar creek, Brandywine, Martindale's creek and Noland's fork, and have put new roofs on the bridges across Blue river and Green's fork.

"We have also built a frame passenger and freight house at Greenfield, and lengthened and extended the side track through the same.

"We have also remodeled our passenger and freight house at Cambridge City, constructed a bridge across the Whitewater Valley Canal, extended the side track through the freight house and over the bridge, and connected it with the main track, besides filling up the ground at both ends and making the station house a most valuable and convenient one.

"We have put in an additional side track at Richmond to stand passenger cars on, and filled up and graveled a portion of the yard, and have, in conjunction with the Eaton & Hamilton Railway Company, widened the joint grade from Richmond east to the point of separation of the two lines, two miles and ten hundredths, and separated the two tracks more than seven feet, so as to insure greater safety, and have put an additional coat of ballast on that part of our track.

"We have caused the side ditches of our line to be well opened, and our embankments to be much widened by the materials taken

out of the ditches in the cuts, and in a number of places have put on some additional ballast on the track; but not so much as we desired should have been done, owing to the employment of our engines in other necessary service. We hope, however, the ensuing summer, to be able to put on all the ballast that will be needed for some time.

"We have had additional portions of our line securely fenced, and have much diminished the risks from killing live stock and breaking up engines and cars, and shall continue to cause the most exposed places to be fenced up, until the whole line shall be made entirely secure.

"Our relations with the Dayton & Western Railroad Company continue of the most amicable character, and, judging from the past, and the mutual interests of the two companies, we have no reason to doubt but that our relations to each other must continue to be of the closest character. From the experience of the past year it is satisfactorily shown that that line will earn a sufficient sum net to pay all expenses of repairs and renewals, interest on its indebtedness, and a handsome per centum on its stock.

"During the present and the next year a large part of our domestic five year 10 per cent. bonds will mature, and for the purpose of meeting them we have caused new bonds to the amount of \$700,000 to be issued, payable in twenty-five years, at the same rate of interest, in the city of New York, and, at the option of the company, redeemable at any time after five years, by giving sixty days' notice prior to the falling due of any installment of semi-annual interest. These bonds are convertible into stock of the company at any time within five years from their date, and are secured by a second mortgage or deed of trust on the railway, its rolling stock, machinery, depots, depot grounds, &c., to J. F. D. Lanier, Esq., of the city of New York, of the well known firm of Winslow, Lanier & Co. Mr. Lanier is also the Trustee in the first mortgage of six hundred thousand dollars at 7 per cent. interest, and having yet nearly ten years to run.

"It is supposed a large portion of the holders of the present domestic bonds will be willing to receive the new ten per cent. bonds so secured in exchange for those they now hold. The rate of interest is large and the security ample, and the high character of the Trustee for probity and business qualifications will insure to the holders and to the company that they will be fairly dealt by.

"If our company, during the past years of embarrassment, with a monetary convulsion and alarm as to all railroad investments in an unfinished state, has been able to meet with promptness, without a single failure, the interest on sums equal to its whole liabilities under the present mortgages, with a trivial difference, it cannot be feared, with the im-

proved condition of things, they can meet all the interest secured by the mortgages, and pay the stockholders a fair remuneration on their investments.

"The reason for making the provision allowing a redemption of the bonds after five years, is to secure the company the right, after that period, if they should have surplus money, or an opportunity shall occur to obtain the money at a less rate of interest, to redeem and take in the bonds, or as many of them as they may have means to pay off, while the rate of interest they bear and the time they will have to run before an opportunity will occur to redeem them, will render them very attractive to capitalists. It may be when our first mortgage 7 per cent. bonds shall mature it will be to the interest of our company to execute a single mortgage for the whole indebtedness they may then owe, after deducting any payments they may be able to make in the meantime, at such rate of interest as the state of the money market may then justify, and dispose of their bonds and pay off both the present mortgages. In such a contingency the provision in the second mortgage bonds allowing such payment will be found of essential benefit."

The officers of the company are:

*Directors.*—Charles Parry, Samuel Hannah, Indianapolis; John T. White, Raysville; Williams Petty, Cambridge City; Jos. W. Jackson, David Commons, William S. T. Morton; John S. Newman, Centerville.

*President*—John S. Newman.

*Vice President*—Charles Parry.

*Secretary and Treasurer*—Samuel Hannah.

*Superintendent*—James M. Smith.

*Assistant Superintendent*—Henry L. Pope.

*Gen. Ticket and Freight Ag't*—Jas. Hooker.

#### RAILROAD COMPANIES.

The Legislature at this moment is in a state of siege. It is more closely invested than the Convention when the cannon of the Jacobins pointed towards its entrances. From the East the Railroad batteries of Wisconsin are playing on the devoted body. On the South, Iowa is carrying up her entrenchments to the very walls of the Legislative conscience. Minnesota is lying low for a simultaneous attack from all quarters.

The competitors for the recent grant of lands flood the city. The hotels are crowded with Presidents and Directors of Railroad Companies. They swarm over the green tree of the Territorial Legislature like locusts, and hang to it like burs. What will be done with the grant, nobody at this moment can possibly divine. We can do nothing to clear up the general obscurity in which this subject is involved, except to indicate the prominent claimants for those portions of the grant which apply to particular roads or branches.

The Northern Pacific Railroad is a candidate for the grant which applies to the construction of the road from Stillwater via St. Paul and St. Anthony, to some point between the foot of Big Stone Lake and the mouth of Sioux Wood river. Their charter passed



1856, authorizes them to build a Railroad to "commence at some convenient point on the St. Croix Lake or River, upon the line of the State of Wisconsin and Territory of Minnesota, and they shall run thence upon such line as they may fix and determine to the cities of Stillwater and St. Paul, thence to St. Anthony; on the Mississippi river, thence on the most feasible route to the western bounds of the Territory, at such point as may be deemed expedient by the Company, with power to build a branch to Red River, at such point as may be deemed advisable." The charter authorizes the Company to consolidate their stock with the Chicago, St. Paul and Fond du Lac Company.

The Company, a few days since, organized under their charter, and the following Directors were elected by the Stockholders.

**Minnesota.**—Alex. Ramsey, Wm. R. Marshall, J. M. Stone, Edmund Rice, St. Paul; Franklin Steele, Fort Snelling; F. R. Delano and Wm. Willum, Stillwater; R. P. Russell, Minneapolis; Richard Chute, St. Anthony.

**Illinois.**—Wm. B. Ogden, Chicago; J. H. Johnson, Woodstock; J. H. Wiggins, Chicago.

**New York.**—Chas. Butler, New York City.

**Iowa.**—N. B. Baker, Clinton.

**Ohio.**—Lucian Tilton, Cleveland.

The Board of Directors at their first meeting, elected for President, Franklin Steele; Vice-Presidents, F. R. Delano and Lucian Tilton; Secretary, J. W. Taylor; Treasurer, S. M. Stone; Attorney, David Cooper.

It will be seen that the preponderance of influence in the Board is Minnesotian. To this Company is *not* opposed the Minnesota Western Railroad Company, incorporated 1853, and again by an amended charter of 1856. The amended charter requires the road to "commence from Stillwater, on lake St. Croix, to St. Paul and St. Anthony, thence across said river, by the most feasible route, to the western boundary of the Territory, at such point as may be decided most expedient by said Company, with a branch to Red River to a point to be selected on said river." The road is required to be completed in six years. The Corporators are Robert J. Walker, A. Hyatt Smith, Joseph B. Doe, Otis Hoyt, Benj. Allen, H. M. Rice, Franklin Steele, Nelson, Haynu McLeod, Wilkin Wilkinson, Staples, McKean, McKunch and others. No organization has been attempted, because no stock has been subscribed. The stockholders can organize when the stock subscribed reaches \$100,000.

For the roads from St. Paul and from St. Anthony to a convenient point of junction west of the Mississippi in the direction of the north of the Big Sioux, there are numerous candidates, according as that point of junction becomes the resting point of an independent system of roads, in which case it will be carried far up the Minnesota Valley, or beyond the Minnesota into Brown County or by being placed at Mendota or Shakopee, becomes merely the connecting link of separate systems. If the junction be fixed at Mendota, the St. Anthony branch will be merely a part of the Cedar Valley and Minneapolis road; while if fixed at Henderson, the charter of the Minnesota and Dakota Railroad Company, passed at the last session, will apply to its construction.

The Corporators of the road are Edmund Rice, Alex. Ramsey, Geo. Culver, Geo. L. Becker, Emanuel Case, F. Steele, H. Wells, J. R. Brown, E. T. Mixen, Chas. Blairs,

Francis Baasen, Michael Schultz, N. R. Brown, Thos. Holmes, and Robert Kennedy. Their charter empowers them to construct a railroad "from St. Paul, by Henderson, to the Southern boundary of the Territory and thence to such point on the Missouri river as the directors may select, with a branch from St. Anthony, forming a junction with said road at Henderson." All lands lying within the limits of the line of this road, which now belong to or may be hereafter acquired by Minnesota, are granted by the bill of incorporation to this company. When five hundred shares of stock are subscribed, they may organize after thirty days notice. The company is not yet organized.

The Hastings, Minnesota River and Red River of the North R. R. Co., incorporated last session, lay claim to a portion of the St. Paul branch of this Big Sioux road, by virtue of their charter, which authorizes them to build a road from Hastings by the most feasible and practicable route to some point on the Minnesota river, between the towns of Henderson and St. Peter, as shall be deemed expedient by the Company, thence westwardly or Southwestwardly to the Missouri River, via New Ulm, opposite the mouth of White Earth River, or as near thereto as may be practicable. The Corporators of this road are J. D. North, R. B. Allison, C. P. Adams, Thos. Foster, Michael March, G. P. Winslow, Alex. P. Bailly, W. G. DeDuc, J. L. Belden, H. B. Plant, W. P. Hillary, J. D. Archibald, McVay, Curtis, Ramsey, Shields, Sibley, Dodd, Gorman, Baasen, Faribault, and others. Not yet organized. Their charter requires the corporators to meet on the next Wednesday to determine if they will accept the charter. Besides this there is the Nininger, St. Peter & Western Railroad Company, whose charter applies to the construction of a road from Nininger to St. Peter. Not yet organized.

The Cedar Valley and Minneapolis Railroad Company is the claimant of that portion of the grant which is applicable to the branch road running from the last mentioned, or Big Sioux line, via Faribault to the north line of the State of Iowa, at some point east of range sixteen. Their charter authorizes them to construct a Railroad from the Iowa line, at or near the crossing of said line, by the Cedar River, through the valley of Straight river to Minneapolis. The Company organized on the 12th of February, by the election as Directors, of F. Steele, Ezra Abbott, H. H. Sibley, J. W. North, James Shields, W. F. Pettit and A. B. Vaughn. Subsequently, General Shields was elected President, Frank Steele Secretary, and H. H. Sibley Treasurer. Nearly \$550,000 stock in the road has been subscribed.

The road from Winona, via St. Peter, to a point on the Big Sioux river, south of lat. 45, as to that part of said road west of the junction with the Root River Valley Road, is claimed by the Winona Transit Company on the one side, and the Root River Valley and Southern Minnesota Railroad Company on the other. The Winona Transit Company was organized in May, 1855, under a charter of that year. The charter requires the railroad to be built "from Winona westwardly by the most feasible and practicable route to St. Paul, or some point on the Minnesota river, thence to intersect any railroad that may hereafter be constructed from Lake Superior or the Mississippi river, to or towards Washington Territory, and to extend such railroad from its junction with the Minnesota river to

such point as they may deem proper on the line which may be adopted and established as the line of the Minnesota Western Railroad Company; and also to such point as they may deem proper with the Lake Superior, Puget's Sound and Pacific R. R. Provided the point of junction shall not be east of the meridian of the mouth of Blue River." The terms of this charter, it will be seen, cover the whole ground of the line designated by the Congressional grant. The Directors of this road are, H. H. Johnson, Wm. Ashley Jones, Henry D. Huff, L. D. Smith, Bemus, Cottle and others, twelve in all. The following are the officers of the Board: H. H. Johnson, President, Wm. Ashley Jones, Vice-President, H. D. Huff, Treasurer, and — Bemus, Secretary, all of Winona. The Root River Valley and Southern Minnesota Railroad Company was organized under a charter passed in 1855, amended at the last session, and its claim to this portion of the grant rests on the following designation of its route. The charter empowers the Company to build a railroad "from Hokah westwardly by the most feasible point to some point between the Southern line of the Territory, and the point where the township line between town 110 and town 111 crosses the Minnesota river—thence westward by the most direct and practicable route to the great bend of the Missouri river, with the privilege of a branch via Target Lake to Eagle Bluffs and with the privilege of a branch to Brownsville." This company lay claim particularly to that portion of the line marked out in the act of Congress which lies west of the Minnesota River. They have preoccupied the route by making surveys, &c.

The road from La Crescent up the Root River Valley, and from Winona westward to a point of junction with the latter, are rightfully claimed, the one by the R. R. Valley and Southern Minnesota R. R. Co., and the other by the Transit R. R. Co. The following gentlemen are Directors of the Root River Valley and S. M. R. R. Company; C. W. Thompson, T. B. Stoddard, C. A. Stevens, Ed. Thompson, J. L. Wentz, Ole Knudson, J. H. Stuart, T. R. Twiford, J. F. Safford, Chas. Wilson, W. B. Gere and H. L. Edwards. The officers are as follows; President, C. W. Thompson; Secretary, H. L. Edwards; Treasurer, T. B. Twiford.

The principal outside companies who are pressing themselves on the attention of the Legislature, are the Milwaukee and La Crosse—the Chicago, St. Paul and Fond du Lac R. R. Co. of Wisconsin—the Iowa, Nebraska and Cedar Valley—and the Dubuque, St. Paul and St. Peter R. R. Co.'s. In the meantime, while these various claims are being urged, the Legislature is quietly solving the intricate problems involved in the disposition of the grant, in caucus. There is a general disposition in the Legislature to turn the cold shoulder to foreign influences—and so far is this exclusive principle carried, that it is doubtful if any of the existing corporations will stand the test—or if all the dignity of the most recent charters, or the most solemn ceremonies of organizing and stock subscribing will insure their recognition.

It is probable that instead of the old companies, chartered at previous sessions, who are applicants for the congressional grant—new companies will be organized, and that as a condition of the new charters, a number of branch roads, not designated in the act of Congress, will be attached to the grant roads as conditions of their acceptance by the cor-



porators. This new batch of charters, as far as we can ascertain, will not generally designate points of junctions—but leave that to the discretion of the Companies.

#### ILLINOIS SOUTHERN RAILROAD.

The above is the name of a new company chartered by the State of Illinois, to build a railroad from the mouth of the Ohio river North-eastwardly to Vincennes. The following is the incorporating act as passed by the Legislature:

SEC. 1. Be it enacted by the people of the State of Illinois, represented in the General Assembly, that Asa R. Butler, George W. Hite, William Burke, D. Y. Bridges, Hiram Boren, J. H. Brown, Robert B. Shelton, John R. Gabriel, M. D. Gilbert, Joseph Robinson, J. S. Robinson, C. B. Brown, C. Agniel, A. J. Kuykendall, and their associates, successors and assigns, are hereby created a body politic and corporate, under the name and style of "The Illinois Southern Railroad Company," with perpetual succession, and by that name be and they are hereby made capable in law and equity to sue and be sued, plead and be impleaded, defend and be defended against in any court of law and (or) equity in this State or any other place; to make, use, and have a common seal, and to alter the same at pleasure; and shall be and are hereby vested with all the powers, privileges, rights and immunities which are or may be necessary to carry into effect the purposes and objects of this Act, as hereinafter set forth; and the said Company are hereby authorized and empowered to locate, and from time to time to alter, change, re-locate, construct, re-construct, complete, equip and keep in order a railroad, from some point in Pulaski or Alexander county, in this State, to some point on the line between this State and the State of Indiana, at or south of Vincennes; and for this purpose said Company is authorized to lay out its said Road, not exceeding two hundred feet wide, throughout the entire length of said Road; and for the purpose of obtaining stone, sand or gravel, may take and appropriate as much more land as may be necessary for the proper construction, maintenance and security of said Railroad, and for constructing shops, depots, and other suitable and convenient fixtures in connection with and appurtenances to said Railroad, may take and have, use and occupy any lands upon either side of said Railroad not exceeding three hundred feet in depth from said Railroad, and also for constructing all necessary bridges, said Company taking all such lands as gifts or purchasing or making satisfaction for the same in the manner hereinafter provided.

SEC. 2. The said Company, and under their direction, their agents, servants and workmen, are hereby authorized and empowered to enter into and upon the lands and grounds of, or belonging to the State, or to any person or persons, body politic or corporate, and survey and take levels of the same or any parts thereof, and to ascertain and set out such part or parts as they shall think necessary and proper for making said Railroad, with one or more sets of tracks or rails, and also to make, build, erect, or set up in and upon the route of said Railroad, or upon the lands adjoining or near the same, all such works, ways or roads and conveniences as may be requisite and convenient for the purposes of said Railroad; and also from time to

time, to alter, repair, re-construct, widen or enlarge the same, or any of the conveniences above-mentioned, as well as for the carrying and conveying goods, commodities, timber, and other things to and upon the said Railroad, as for carrying all kinds of materials necessary for the making, erecting, furnishing, altering, repairing, amending, re-constructing or enlarging the works of, or connected with the said Railroad, and contract and agree with the owner or owners thereof for earth, timber, stone, sand, gravel, or other materials, or any article whatever which may be wanted in the construction or repairing of said Railroad, or any of its appurtenances, they the said Company doing as little damage as possible in the execution of said powers hereby granted, and making satisfaction in the manner hereinafter mentioned, for all damages, if any there be, sustained by the owner or owners of said lands.

SEC. 3. Said Company may contract and agree with the owner or owners of such land or lands as the said Company may wish to use or occupy for the purposes of said Road, or for the purpose of procuring sand, gravel, stone, earth, or other materials to be used in the construction of said Road, or for the repairs of the same; and in case said Company cannot agree with the owner or owners of all or any of such lands as aforesaid, so as to procure the same by the voluntary deed or act of such owner or owners, or if the owner or owners thereof be a *femme covert*, an infant, *non compos mentis*, unknown, or out of the county in which the lands or any property wanted may be situated, the same may be taken and paid for, if any damages are awarded, in the manner provided for in "An Act to provide for a general system of Railroad Incorporations," approved November 5, 1849; and the final decision or award shall vest (in) the Company hereby created all the rights, privileges, powers, franchises and immunities in said Act contemplated.

SEC. 4. The Capital Stock of said Company shall be Three Millions of Dollars, and the same may be increased by a vote of a majority of the Stockholders, at any regular meeting, or at any called meeting, legal notice being given to each stockholder of such meeting and its object; provided the total amount of stock shall not exceed the sum necessary to build and complete said Railroad, and furnish the necessary buildings, machine shops, station houses, water tanks, wood sheds, depots, engines, freight and passenger cars, and all other necessary rolling stock for carrying on the business of said Railroad.

SEC. 5. The Capital Stock shall be divided into shares of One Hundred Dollars (each,) which shall be deemed personal property, and may be issued, certified, transferred and registered in such manner and in such places as may be ordered or provided by the Board of Directors, who shall have power to require the payment of stock subscriptions in the manner and at the time and place, and in such sums, as they may direct, and on refusal or neglect on the part of any stockholder to pay the calls on the stock owned by him or her, as required by the Board of Directors, the share or shares belonging to such stockholder, may, after thirty days' public notice, be sold at auction, under such rules as the Directors may adopt; and if any surplus money remain, after deducting the payment due, with interest and necessary costs of sale, the same shall be paid to the delinquent stockholder.

SEC. 6. Each share of stock, on which

there shall be no unpaid calls, shall entitle the owner thereof to one vote, either in person or by legal proxy, provided that he or she shall have been the *bona fide* owner thereof, for thirty days previous to the day of the meeting, at which such vote shall be offered, and for that purpose the ownership of said stock shall be determined by the books of the Company.

SEC. 7. The Board of Directors of said Company shall consist of seven persons, each one of whom must be a stockholder therein, and the first Board of Directors shall be chosen within thirty days from the passage of this act, and shall hold their offices for one year, and until their successors are duly elected or appointed; and said Board of Directors shall elect one of their own number as President, and shall also elect a Secretary and a Treasurer, who shall hold their offices, as the rules and by-laws of said Company shall determine.

SEC. 8. The said Company shall have power to purchase lands with the stock of said Company or otherwise, and to borrow money to build, construct and equip said Railroad, and to secure the payment of said money, may mortgage the lands, road, or other property of said Company, may give bonds on the income thereof, and may by their officers or agents, duly authorized, sell, dispose of, or negotiate such bonds, stocks, or mortgages belonging to said Company, at such times and places, and at such rates, and for such prices as in their opinion, will best advance the interests of said Company and if such bonds, mortgages, or stocks are sold at a discount, such sale shall be as valid and binding, in every respect, as if sold at par value; and the said Company are hereby authorized to confer upon the owner or holder of any bond or mortgage, issued as aforesaid, the right to convert the same into the stock of the company; provided the stock thus issued shall not increase the actual issue beyond the amount of capital necessary to complete the said Road as before mentioned.

SEC. 9. The several towns, cities and counties, through, or near which said Road shall pass, may subscribe for, and take stock in this Company; provided, that no such subscription shall be made, unless a majority of the legal voters of said town, city or county, shall vote for the same, at an election to be held, under orders of the county Court in cases of counties, and of the corporate authorities in the cases of towns or cities.

SEC. 10. Said Company shall have power to connect its Railroad with any Railroad now constructed or hereafter to be constructed on the line of said Road, in this State, or the State of Indiana, on such terms as said Companies may agree upon.

SEC. 11. Any other Company may connect a Railroad from the City of Cairo, or any other point, in either of the counties of Gallatin, Saline, Hardin, Pope, Massac, Alexander or Pulaski, with such Road, and have a right to use the same, by paying such sums as the parties may agree upon, and in cases of disagreement as to the terms, the Judge of the Circuit Court of either of said counties, setting as Chancellor, shall decide upon the amount to be paid on petition to be filed, which petition shall be proceeded in, according to the rules and practice that govern Chancery proceedings.

SEC. 12. This act shall be deemed a public act, and is hereby so declared, and shall be favorably construed for all purposes herein expressed and declared, and in all courts and



places whatsoever, and shall be in force from and after its passage.

SAMUEL HOLMES,  
Speaker of the House of Representatives.  
JOHN WOOD,  
Speaker of the Senate.  
Approved, Jan. 31st, 1857.

WILLIAM H. BISSELL.

The projectors of this Railroad, in presenting their charter, feel that a brief statement of its advantages will convince every one, who may examine the facts, of the vast importance of its speedy construction. To this end we would say, *please look at the map*. At or near its southern terminus it makes connections with the Cairo and Fulton, the Mobile and Ohio, the Illinois Central, and the Mound City Railroads, and the Lower Mississippi river. At its Northern terminus it forms a connection with the Evansville and Crawfordsville, the Wabash Valley, the Indiana South-western and the Ohio and Mississippi Railroads; thus forming the most direct connection between the Great South-west and the East and North-east. Passing through the granary of the West its local freight business will be unequalled. In consequence of the interruption of navigation in the Ohio river, both from ice and low water, it will do an immense through freight and passenger trade. Should the Directory determine to lay a broad gauge track, the distance from its southern terminus to Cincinnati could be traveled (via this Road and the Ohio and Mississippi Railroad, which will be completed on the first of April next,) without a change of cars.

The Company was organized the 3d of February, by the election of the following gentlemen as officers and Directors:

*Directors*—Gen. Asa R. Butler, of Ohio; Hon. H. J. Kuykendall, of Illinois; Charles B. Brown, of Ohio; George W. Hite, of Illinois; Robert B. Shelton, of Illinois; William Burke, of Illinois; Hiram Boren, of Illinois.

*President*—Gen. Asa R. Butler.

*Secretary*—M. D. Gilbert.

*Treasurer*—William Burke.

*Counsellor*—George W. Hite, Esq.

#### SUNBURY AND ERIE R. R.

*To the President and Members of Select Council:*—The committee to whom was referred the communication from the Sunbury and Erie Railroad Company, asking assistance for the completion of their road.

#### REPORT.

That they have given the subject their prayerful consideration, and have deemed it proper in view of the large pecuniary interest held by the city of Philadelphia, that Councils should know something of the financial condition of that company, as well as the probable advantages of the road to the business interests of the city generally.

The first subscription of \$1,000,000 by the city of Philadelphia, under the ordinance of January 7, 1854, was conditioned upon a subscription made by Crane, Dillon & Co., and others for a like amount, commonly known as the "Crane subscription." The original parties to this subscription failed to meet their obligations, but the amount was taken by J. A. Gamble & Co., and the payments assumed by J. Burns & Co., in their contract for grading and bridging that portion of the road from Lock Haven to Ridgeway, and will be received as payment under their contract for that portion of the work.

On this subscription there has been paid to the Company \$180,000, being more than the proportion required by the contract; the balance will be paid as the work progresses.

It will thus be seen that, while the "Crane subscription" was at one time regarded as worthless, or as an imposition, with a view only to secure the city subscription, it has, by careful management of the Board of Directors, been fully secured, and made available for the whole amount in the completion of the road.

The second subscription of \$1,000,000 by the city of Philadelphia was conditioned upon a similar subscription by other parties as follows:

District of Richmond.....	\$250,000
Montour Iron Company.....	500,000
Individuals.....	251,700
<b>Total.....</b>	<b>\$1,001,700</b>
Of these there have been paid as follows:	
District of Richmond.....	\$250,000
Montour Iron Company.....	38,300
Individuals.....	151,070
<b>Total.....</b>	<b>\$439,370</b>
Leaving of the Montour Iron Company subscription.....	\$461,700
Individuals.....	100,630
<b>Total.....</b>	<b>\$562,330</b>
Of this balance it is believed that nearly all of the Individual subscriptions will be realized as soon as the work is again actively resumed.	

The contract with the Montour Iron Company was cancelled under the Presidency of Governor Bigler, and a new one made for a much smaller amount; and with this reduction in their contract, a corresponding reduction was made in the amount of their subscription.

It is proper here to say, that while the whole amount of the original subscription could have been realized had their original contract with the company been adhered to, it was deemed advisable for the interest of the Sunbury and Erie Railroad Company, rather to relinquish a part of the subscription than be held by the original terms of the contract.

In this, while the best interests of the company appear to have been served, it seems unjust to charge the directors with any unfairness in obtaining the subscription from the city. But the reduction of the subscription outside of the city by this means, was again supplied by a subscription from the Cleveland, Painesville and Ashtabula Railroad Company for five thousand shares, or \$500,000, upon which all the instalment have been paid, and more than replaces the cancelled subscriptions of the Montour Iron Company.

There has already been paid upon subscriptions other than municipal corporations, \$1,269,365, and there is still outstanding or unpaid upon subscriptions of this character, \$192,935, independent of subscriptions made or assumed by contractors: nearly all of which, as before remarked, are of a character to justify the belief that they will be paid when active operations are again resumed upon the road.

Subscriptions have been made by the city of Erie, county of Erie, Warren county, and individuals in that section, to the amount of \$1,049,000, conditional upon their application to the completion of the western end of the road. That work is now actively progressing to a point eighty-two miles east of Erie, and on the margin of the coal fields of McKean county. It is believed that this portion of the road will be entirely completed by the enterprising friends of the company residing in that section of the State, and those interested in the trade now seeking this outlet.

The company confidently look forward to the completion of these eighty-two miles in the early part or middle of the coming year.

The present liabilities of the company appear by the report of the President and Directors to be about \$545,000, which can be met by the general assets of the company, as appears by said report, leaving the road entirely free from debt at this time—with the exception of about \$300,000 of outstanding bonds—and a surplus from the individual subscription of from \$150,000 to \$210,000.

The Sunbury and Erie road commences at Sunbury, and is now completed to Williamsport, a distance of forty miles, and has been worked for the past two years (for the want of rolling stock) by other companies on shares. The trade during that time has increased from \$12,061 82 net earnings, the first year, to \$40,500 net earnings the second, or last year, and a still greater increase is confidently looked for the coming year, as the Sunbury and Erie company have cancelled their contract with the Philadelphia and Sunbury company for working the same, and have entered into a contract with said company, by which the Sunbury and Erie company will now work the road of the Philadelphia and Sunbury company, from Sunbury to Mt. Carmel, thus giving to the Sunbury and Erie company the command of the entire coal transportation from the Shamokin region.

The present terminus of the finished road west is at Williamsport. From that point a very large amount of the grading is completed and ready for the superstructure for a distance of sixty miles, but cannot be completed until the intermediate sections are also graded. It may not be improper here to remark that a very large proportion of the heaviest sections are among those already graded. From this point about ninety miles west, no work has been done. This breaks the connection with the Western Division, now in progress of completion by the City of Erie and others interested in securing an outlet for the trade of that section of the State. It seems but just to say, that the city of Erie as well as her citizens have manifested great interest as well as great liberality towards this enterprise. They have, in addition to their guarantee for the completion of the western end of the road conveyed to the company in fee simple, a wharf property on the harbor containing about one hundred and fifty acres, and estimated to be worth at least one million of dollars, upon condition, however, that the company would construct piers thereon. This has been done at a cost of about sixty thousand dollars; and although the outlay was regarded by many as premature, it was evidently one of sound policy on the part of the company, and secured to them probably the best harbor property on the Lakes and upon no unreasonable condition on the part of the city of Erie, while it provided for the company that which, at the completion of the road, might have been unattainable.

The unfinished work on the road from Williamsport to the eastern end of the Erie contract is yet to be provided for, and is estimated at \$6,500,000. This is the particular subject of the application to Councils by the company.

The committee have endeavored to give a brief but plain statement of the condition of the company as far as the time would allow of an examination, and they believe it entirely reliable. It may not, however, be out of place to refer briefly to the chain of roads which



the Sunbury and Erie will complete to the city of Philadelphia. The trade of the harbor of Erie was considered of sufficient importance to originate this road; since which time several roads have been laid out, forming almost a bee line from Ridgway (being about twenty miles east of the point to which the Sunbury and Erie road will be completed by the Erie subscription) to Council Bluff, on the Missouri river; a greater portion of which roads are now nearly graded, and a portion of which will be in running order during the current year.

The first of these roads is the Venango, a distance of one hundred and ten miles, from Ridgway to the Pennsylvania line. This road is under contract, the means are mostly provided, and no doubt is entertained of its early completion. The grading of the Clinton line, from the State line to Hudson, Ohio, fifty-four miles, and connecting with the Cleveland Railroad, all is done, and the means are all provided for the entire completion of the road. The grading of the Clinton Extension, from Hudson to Tiffin, Ohio, ninety-four miles and connecting with the Mansfield and Newark road, from Sandusky, is one third done and the means nearly all provided for its completion.

The grading of the Tiffin and Fort Wayne road, from Tiffin to Fort Wayne, Indiana, one hundred and two miles, connecting with the Fort Wayne and Chicago road, is all done, the means are all provided, and the rails will at once be laid. The connection from Fort Wayne to Rensselaer has not yet been placed under contract, but the Fort Wayne and Mississippi Railroad Company have obtained a charter for that purpose, and are now making their arrangements to commence working. From Rensselaer, Indiana, to New Boston, Illinois, a distance of one hundred and seventy-eight miles, the means have all been provided, and the grading and rails will be one-third done in 1857.

This will complete a number of important connections from New Boston to Council Bluffs, by the Philadelphia, Fort Wayne and Platte River Air Line Railroad, about forty miles of which will be running in 1857. These roads, it is believed, will all be in working condition and ready to pour their trade upon us before the Sunbury and Erie road could be finished, if the means were now at the disposal of that company.

The amount of trade from that section of country can be approximated by the risk that these several companies are incurring in the cost of their respective roads, should that trade really not be available to them.

The business, however extensive, from this long line of connecting roads, may be considered as only a collateral advantage of the great line to the harbor of Erie. At this point, Philadelphia becomes connected with the immense chain of inland seas, and their productive bordering States, which have been, ever since the completion of the Erie Canal, pouring their wealth into our sister city of New York. So great has this trade now become, that, in addition to this canal, New York has since constructed two lines of railroads to secure it, and all these channels are over charged with business.

Possessing, as Pennsylvania does, the very best harbor on the lakes, and that too at the nearest point on the seaboard, the completion of this road cannot possibly, in the opinion of all who have examined the subject, fail to secure to our city an immense trade to which she is now a stranger, and in thus contribu-

ting to our business prosperity, also render it certain that the road by which it reaches us must pay full dividends upon its stock.

It is for the capitalists and business men of the city to determine what measures they should adopt to secure the completion of this link, and for the City of Philadelphia, already a heavily interested stockholder, to inquire whether any, and what steps she should take to secure her present investment.

That the road should be at once completed, at least as far as Farrondsville, there can be no question. This would save from entire loss that part upon which so much has already been expended, and now within from seven to eight hundred thousand dollars of working condition. This section alone would secure a heavy trade for the road, as there are now three companies who have made large investments by constructing lateral roads from eight to ten miles, to connect their mining operations with this road, and secure an outfit for their business, as well as a heavy lumber and freight trade.

Your committee, (after a close examination into the importance of this road,) cannot but express the hope that there is sufficient enterprise among the capitalists and business men of this city to secure its completion. A single vigorous effort would accomplish this most desirable object.

D. S. BEIDEMAN,  
JOSEPH TAYLOR,  
O. P. CORNMANN,  
GEO. WILLIAMS,  
R. McCAY,

May 8, 1857.

Committee.

Commercial Advertiser.

#### OTTAWA AND LAKE HURON CANAL.

The Report of the commissioner of Public Works, for 1856, contains the report of Mr. Shanley upon the survey now progressing to ascertain the practicability of a ship canal between the St. Lawrence and Lake Huron, via the Ottawa River, Lake Nipissing and French River.

The estimated distance from Montreal to the mouth of French River on Georgian Bay, Lake Huron is 430 miles, following the old voyageur route; of which the greatest portion is open river or lake navigation. The greatest impediments to large craft it is believed will be found between Montreal and Ottawa City, a distance of 120 miles.

Of the other extremity of the proposed route, Mr. Shanley says:—

As to the result of my observations on that section of the route where the flow of the waters is to the west, not herein before specially described, I will briefly state, that that mouth of the French River by which I entered it, under the guidance of an Indian of Lake Nipissing, is not obstructed by islands and is capable of being made accessible for large vessels: that the French River itself is singularly facile of adaptation to the purposes of a deep navigation: that Lake Nipissing, a noble expanse of water, possesses, at least on that side of it (the southerly) with which we have to do, ample depth and fine harborage: and, finally, that the ridge separating its waters from those of the Ottawa cannot be looked upon as a formidable barrier to their union when it is known that a cutting of three-fourths of a mile in length by twelve feet in depth would cause the upper waters of the Matawan, now tributary to the Ottawa, and more than 200 feet deep, to flow to Lake Huron by way of the French River.

I voyaged the whole of the above mentioned

portion of the route, some 260 miles, by canoe, and found it to embrace a vast proportion of deep, still water, stamped to a great extent, with Lake rather than River characteristics; and I reached the end of my journey strongly impressed with the conviction that nature has there marked out a pathway in the desert that the Genius of Commerce will, at no far off day, render subservient to its ends; the navigable connection of the great Lakes with "La Grande Riviere du Nord," I look upon as inevitable; the scale of navigation to which the route, as a whole, is capable of being adapted, remains to be determined by survey.

Ascending from Ottawa City it is proposed to follow the Ottawa river to the mouth of Matawan, a distance of 180 miles, and 300 from Montreal; of this 85 are now navigated by steamers drawing from 5 to 5½ feet of water, in three different sections:

- 1st. Lac des Chenes: commencing 9 miles above Bytown, and extending to the foot of the Chats rapids 25 miles
- 2nd. Lac des Chats; from the head of Chats rapids to Portage du Fort. 23 miles
- 3rd. The Deep River: extending from near the head of Les Allumettes Island to the foot of Les Deux Joachims rapids, about . . . . . 37 miles.

A Canal of three miles in length was in course of construction between Lac des Chenes and Lac des Chats, until suspended last year to await the result of the present survey; and a survey had been made of another nine miles in length between the Lower Ottawa and Lac des Chenes. The completion of these works would carry the continuous navigation to Portage du Fort, 60 miles above Ottawa City.

Thence to the extremity of Les Allumettes Island, 40 miles, occurs a stretch of tumultuous river broken up with islands and interrupted by rapids, intervening between Lac des Chats and Deep River. Upon this section of the Matawan the engineers have been engaged all winter, in the depth of the wilderness with the thermometer frequently at 398 below zero. The great difficulty of the Upper Ottawa lies here, and another year will be required to complete the survey. The section from the Joachim Rapids, at the head of the Deep River navigation to the mouth of the Matawan, fifty miles, presents no formidable difficulties, beyond four short rapids varying in fall from 10 to 40 feet. Ascending the Matawan, 40 miles in length, with its head waters in Trout Lake within three quarters of a mile of those of La Riviere de Vase, a tributary of Lake Nipissing, we reach the field where two exploring parties of the survey wintered, making an accurate chart of the river and its lakes, and a topographical survey of the ridge which divides the waters of the Matawan from those of Lake Nipissing.

The distance from the mouth of the Matawan to that of French River on Lake Huron is 125 miles. The length of territory under survey at the different points is 110 miles.

Mr. Shanley's report is of course incomplete; a much larger staff and outlay will be required with many months of labor before a completely satisfactory conclusion can be come to that a ship canal is feasible upon this route, at a cost bearing a due proportion to its advantages. But the obstacles already discovered are far less formidable than was anticipated by the most sanguine friends of the scheme.

The concurrent examination of 40 miles of country above Pemproke, for a Railway route proved it to be impracticable, and the survey was abandoned.



## RAILROAD RECORD.

TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rt.	When Payable.	Where Payable	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp'r	.....	173	5,000,000.00	.....	.....	.....	.....
493,800	6			1862-3	2d	.....	Androscog'n & Kennebec	.....	54.55	1,400,000.00	.....	.....	.....	.....
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange.	.....	86.5	1,000,000.00	199,000.00	209,475.46	110,346.98	none.
52,646	6			now	"	.....	B'ng'r, Old T. & Milford.	.....	12.5	135,000.00	52,646.25	278,123.74	173,780.74	4 pr. ct. 6m
500,000	7		N. Y.	1860	"	.....	Boston & Worcester.	.....	44 6-8	4,500,000.00	500,000.00	29,104.40	2,671.61	15,000 in '53
300,000	7			1866	1st mortgage.	.....	Buffalo & State Line.	.....	.....	1,300,000.00	.....	1,108,781.90	437,062.03	120,000 4.5m
900,000	7			1857-9-62	Domestic.	.....	" " "	.....	.....	.....	.....	.....	.....	5 pr. ct. 6m.
577,187	6			1864	4th mortgage.	.....	Central Ohio.	.....	30.	.....	.....	.....	.....	.....
192,200	7			1872	1st mortgage.	.....	Champl'n & St. Lawrence	.....	43	1,872,800.00	1,001,057.00	168,200.00	77,700.00	10 per ct.
380,000	7			1874	2d	.....	Ch'r'l'ed South Carolina.	.....	110	1,750,000.00	320,000.00	201,219.56	47 per ct. L	\$72,300
1,440,000	7			1864-7	1st mortgage.	.....	Chgo, Burl'ng'n & Quincy.	.....	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,300,000	6-7-8		N. Y.	1868-9	2d	.....	" " "	.....	.....	.....	.....	.....	.....	.....
374,000	8			1868-76	Convertible.	.....	Chicago, Fulton & Iowa.	.....	5	.....	.....	.....	.....	.....
1,300,000					1st mortgage.	.....	Cin. Wil'ng'n & Zanes'ville	.....	25.	1,761,149.16	2,241,500.00	221,491.96	.....	.....
532,000					2d	.....	" " "	.....	.....	.....	.....	.....	.....	.....
104,000					3d	.....	" " "	.....	.....	.....	.....	.....	.....	.....
305,500					Income.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	.....	104.	4,741,220	.....	1,329,754	700,304	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning.	.....	85	1,500,000.00	.....	.....	.....	.....
400,000	7			1861	2d	.....	Cumberland Valley.	.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24
000,010	7			1873	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00	665,578.79	288,077.84	\$234,133
500,000	6			1857-8-9	1st mortgage.	.....	Eastern Railroad.	.....	93-6-10	3,345,900.00	.....	30,897.30	19,092.30	.....
350,000					1st mortgage.	.....	East Ten. & Virginia.	.....	130	625,450.00	.....	243,970.42	136,061.90	\$133,281.45
740,000	7			1869	1st	.....	Essex Railroad.	.....	20	700,000.00	.....	681,162.52	213,837.81	3 per cent.
88,000	10			1861	2d	.....	Evansville & Crawf'd'vie	.....	109	2,228,657.60	.....	206,836.00	14,822.45	\$166,240.00
400,000	7			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,540,000.00	.....	27,376.69	14,207.07	8 pr. ct.
200,000	10				1st mortgage.	.....	Fox River Valley.	.....	33	800,000.00	.....	2,068,836.00	339,196.50	176,529.93
100,000	6				1st mortgage.	.....	Fair Haven Branch.	.....	15	300,000.00	.....	1,924,352.44	718,037.40	.....
100,000	6				1st	.....	Georgia RR & Banking Co	.....	233	4,156,000.00	.....	.....	.....	.....
300,000	7				1st	.....	Grt Falls & Conway R.R.	.....	20	.....	.....	.....	.....	.....
4,000,000	6 1-9			1858	1st	.....	Grt West'n R.R. of Can.	.....	281 1/4	4,191,550.00	.....	2,068,836.00	339,196.50	176,529.93
2,000,000	7			1869-70	1st	.....	Housatonic Railroad.	.....	74	2,000,000.00	.....	1,924,352.44	718,037.40	.....
1,812,000	7			1860	2d	.....	Hudson River.	.....	144	4,000,000.00	.....	.....	.....	.....
12,885,000	7			1875	3d mortgage.	.....	" " "	.....	144	4,000,000.00	.....	.....	.....	.....
4,115,000	6			1875	1st	.....	Illinois Central R. R.	.....	134.	18,453,376.00	.....	1,476,035.27	103,149.08	7 pr. ct.
3,000,000	7			1860	1st	.....	Indiana Central.	.....	72 1/2	3,553,376.00	.....	351,871.00	.....	3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.	.....	Iron R. R.	.....	13	123,700.00	.....	.....	.....	.....
700,000	7	Jan. & July 1		1862	1st mortgage.	.....	Kentucky Cen. 2d Div.	.....	.....	719,500.00	.....	.....	.....	.....
					1st	.....	Knoxville & Kentucky.	.....	32	166,000.00	.....	23,233.59	14,233.59	.....
218,000	7				1st	.....	Laurens (S. C.) R. R.	.....	184	300,000.00	.....	50,234.71	14,149.13	\$4,000
1,000,000	7			1866	2d	.....	Louisville & Nashville.	.....	12 35	2,697,090.00	.....	587,236.57	162,277.50	10 pr. ct
1,000,000	7			1875	2d	.....	Lowell & Lawrence.	.....	.....	2,697,090.00	.....	.....	.....	.....
2,000,000	6				1st	.....	Mad River & Lake Eric.	.....	.....	2,697,090.00	.....	.....	.....	.....
2,500,000	7			1868	1st	.....	Manchester & Lawrence.	.....	26	1,000,000.00	.....	.....	.....	\$24,000
2,000,000	7			1874	1st	.....	Marietta & Cincinnati.	.....	19.	.....	.....	.....	.....	.....
60,000	7 and 8			1867	1st	.....	Mexican Gulf R. R.	.....	27	.....	.....	.....	.....	.....
420,000	8				1st mortgage.	.....	Milwaukee & Horicon.	.....	30	600,000.00	.....	193,752.42	55,501.74	7 pr. ct.
329,000	8			1881	1st	.....	Mineral Point R. R.	.....	32	923,500.00	.....	7,707,348	3,609,481	2 pr. ct. 6m
320,000	8			1-68	2d	.....	Mobile & Ohio.	.....	32	23,067,400	14,763,897	324,891.57	.....	3 pr. ct. 6m
6,000,000	6			1884	1st	.....	Nashua & Lowell R. R.	.....	15	.....	.....	.....	.....	.....
500,000	7			1869	1st mortgage.	.....	New Haven & Northm'tn	.....	55	.....	.....	.....	.....	.....
2,350,000	7	May & Nov.	N. York		Con. till 1850.	89	New York Central.	.....	86.	.....	.....	.....	.....	.....
8,892,600	6	June & Dec.	N. York	1864	1st mortgage.	86 1/2	N. Y. & Harlem R. R.	.....	15 1/2	5,717,100.00	1,040,393.26	64,678.71	37,692.30	.....
936,000	7			1873	2d	79	N. Y., Prov. & Boston.	.....	50	1,58,000.00	245,713.00	51,544.40	.....	.....
411,700	6			1864	1st	.....	N. Lon., William'ntu & Pal.	.....	66	1,700,000.00	.....	.....	.....	.....
500,000	7			1863	2d	.....	Pontchartrain R. R.	.....	6	500,000.00	.....	.....	.....	\$25,000
300,000	6				1st mortgage.	.....	N. O., Opel'o's & Gr. L. West.	.....	62 1/2	6,000,000.00	.....	116,795.00	366,118.80	7 pr. ct.
1,500,000	6			1873	2d	.....	N. Y. & New Haven.	.....	103 1/2	3,000,000.00	.....	1,007,666.42	.....	.....
2,000,000	6			1885	3d	.....	North Western Va. R. R.	.....	.....	.....	.....	.....	.....	.....
1,500,000	7			1885	1st mortgage.	.....	Northern (N. Y.) R. R.	.....	118	2,000,000.00	.....	600,000.00	.....	7 pr. ct.
419,300	5			1877	1st mortgage.	.....	North Missouri R. R.	.....	19 1/2	.....	.....	25,176.74	88,458.56	2 1/2 pr. ct.
221,800	6			1860	1st mortgage.	.....	Norwich & Worcester RR	.....	60	2,111,500.00	.....	304,236.33	.....	.....
					1st mortgage.	.....	Ogd'sb'g. Clay't'n & Rome	.....	.....	.....	.....	.....	.....	.....
400,000	6			1866	1st mortgage.	.....	Ontario, Simcoe & Huron	.....	94	.....	.....	289,690.10	137,875.93	5 pr. ct.
1,200,000	6			1875	2d mortgage.	.....	Orange & Alexandria R.R.	.....	88 3/4	2,957,500.00	.....	276,339.02	.....	.....
300,000	7			1868	1st	.....	Peoria & Bureau Val. R. R.	.....	47	1,500,000.00	.....	.....	.....	.....
300,000	8			1873	1st	.....	Philadelphia & Trenton.	.....	28 1-5	1,000,000.00	.....	.....	.....	6 pr. ct.
350,000	6			1861	1st mortgage.	.....	Portsmouth & Concord.	.....	47	.....	.....	.....	.....	.....
800,000	7			1864 to 1874	1st	.....	Potsdam & Watertown.	.....	76	2,000,000.00	.....	63,525.42	.....	.....
1,260,000	6			20 years.	1st mortgage.	.....	Rutland & Washington.	.....	63 1/2	950,000.00	.....	.....	.....	.....
					1st mortgage.	.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00	.....	.....	.....	.....
500,000	6				1st mortgage.	.....	Salem & St. Louis R. R.	.....	168 1/2	400,000.00	.....	.....	.....	.....
250,000	6				1st	.....	Sud'sky, Mansf'd & New'k	.....	116	.....	.....	.....	19,050.64	.....
					2d	.....	Sullivan Railroad.	.....	26	500,000.00	.....	75,246.06	17,378.08	.....
317,000					1st mortgage.	.....	Tennessee & Alabama.	.....	145	.....	.....	39,586.44	.....	11m. 1 pr. ct
300,000				1861	1st mortgage.	.....	Terre Haute & Richmond	.....	73	1,294,450.00	.....	.....	.....	.....
198,000				1840	2d	.....	Toledo, Wabash & Western	.....	212	.....	.....	.....	.....	.....
262,500				1875	3d	.....	Troy & Boston.	.....	.....	1,000,000.00	.....	.....	.....	.....
2,500,000					1st, 2d, 3d	.....	Vicksburg & Jackson.	.....	46	.....	.....	.....	165,076.04	.....
596,000	7				1st mortgage.	.....	Virginia & Tennessee.	.....	215	3,000,000.00	.....	322,048.60	.....	2 pr. ct.
200,000	7				1st mortgage.	.....	Westchester (Pa.) R. R.	.....	31	165,000.00	.....	.....	.....	.....
					2d	.....	Wilmington & Manchester	.....	171	.....	.....	.....	.....	.....
					1st mortgage.	.....	Winchester & Potomac.	.....	32	.....	.....	.....	.....	.....
					2d	.....	Worcester & Nashua.	.....	45 69.	.....	.....	.....	.....	.....



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

April 17th, 1857.	
Belydère, Del. guar. 1st mort. conv. ....	@ 88
Chicago & Rock Island, Mort. conv. 1858, ..	" "
Cin. Ham & Dayton, 2d mort. ....	" 80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	66 " 69
Erie, 3d Mortgage, 1883, ..	83½ " 84½
" Sinking Fund, ..	82 " 84
" conv. 1862, ..	73 " 75
Grand Trunk (Canada) Debenture, ..	88 " 90
Great Western " conv., ..	122 " 127
" " non-conv., ..	106 " 108
Illinois Central, 1st Mort., 7½, ..	90½ " 91½
" " with option 70 per cent. shares till Jan. 1858, ..	106 " 108
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	86 " 88
Little Miami 1st Mort. not conv. 6's, ..	" "
Marietta and Cincinnati, 1st Mort., ..	" "
Michigan Central, conv., 8's, 1860, ..	90 " 91
do do do 1869, ..	90 " 91
N. York Central. No Mort. Not conv., 6's 78 " 80	
" conv., 7's, ..	92 " 94
Ohio and Mississippi, 1st Mort., ..	" "
Ohio and Pennsylvania, Income 1872, ..	69 " 71
Panama. No mort. conv. 1866, ..	" "
Pennsylvania, 1st Mort., conv., ..	88 " 89
" Sterling, 2d Mort., ..	91 " 93
Stenhouseville and Ind., 2d Mort., ..	" "

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending May 13, 1857.

## BONDS.

\$6,000 Covington & Lex. R. R. Co. 6 per cent. Bonds, guaranteed by the city of Covington, ..	60
5,000 Covington & Lex. R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	70
2,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	80
19,000 Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds of 1860, 1861 and 1866, ..	90
5,000 Pendleton county, Ky., 6 per cent. Bonds, ..	60 and int.
3,000 Indianapolis & Cincinnati R. R. 7 per cent. 2d Mortgage Bonds, ..	80
1,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds, ..	56
1,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d mort. bonds, ..	62½
1,000 Cincinnati, Ham. & Dayton R. R. Co. 7 per cent. 1st Mort. Bonds, ..	90
600 Medical College of Ohio 10 per cent. Bonds, ..	90
425 Little Miami R. R. Co. Dividend Scrip, ..	82

## STOCKS.

300 Shares Ohio & Miss., ..	11½
50 " do do, ..	12
100 " Cin. & Chicago, ..	3 and int.
160 " Little Miami, ..	95
90 " do do, ..	95½
20 " do do, ..	96
50 " Cin., Ham. & Dayton, ..	68
200 " Marietta & Cincinnati, 60ds 19	
40 " Cov. & Lexington, ..	20
34 " Farmers' Bank Ky., ..	120

## MONETARY AND COMMERCIAL.

We have but little change to note in the money market, except a rather less pressing demand than previously noted. We do not expect to see great urgency among borrowers till nearer the 1st of July. The supply is, however, not adequate to the wants of those that have need. Rates are, therefore, unchanged, and we still quote regular houses at 10 to 12 per cent., and outside rates at 12 to 24 for good paper.

Eastern exchange has been sustained at ¼ to 1 per cent. now for a considerable time. While this lasts we shall have a limited supply of currency. New Orleans is ¼ discount to par.

From the East we notice a quiet state of the markets. In New York the banks show an increase in the loans and discounts, an increase in the specie, an increase in the circulation, and a decrease in the amount of undrawn deposits. There has been an increase in the banking capital of the Metropolis of \$811,000, which is

about the amount of the increases given above. The total banking capital of New York is now \$60,442,000. What a contrast with Cincinnati. The Bank of Commerce alone has a paid in capital of \$7,811,000. Call loans are quoted at 7 per cent. Prime paper is sought for outside at 7½ to 9 per cent., according to date.—Stocks were dull.

Hewson & Holmes, in their circular, say:

The Stock market opened early in the week with a very languid feeling, and a tendency to lower prices. On yesterday and to-day, however, the demand has been more decided, and at the close prices are firmer, and in some instances slightly better. The extraordinary cold and great backwardness of the spring is, no doubt, affecting business unfavorably, and curtailing the receipts of railroads, both in freights and passengers.

Little Miami shares sold early in the week at 95, a decline of 1 per cent.; but subsequent sales show an improvement of ½ per cent., with one small sale at 96, which is the highest price obtained in many months for this favorite stock. Cincinnati, Hamilton & Dayton shares have also declined 1 per cent., with sales at 68, closing with a very firm feeling and an indisposition to sell at less than 69. Indianapolis & Cincinnati shares have been very quiet; no transaction of moment has come under our observation; the earnings of the road for April were \$44,500, which is slightly in advance of the same month last year; this, when there has been a marked falling off in the receipts of many of the leading western roads, as compared with the corresponding month of last year, is doing remarkably well.

The earnings of the Mad River & Lake Erie Railroad for April show a large and really astonishing increase over the corresponding month of 1856. For April, 1857, they were, from all sources, .. \$50,810. For April, 1856, .. 39,794

Increase (28 per cent.) .. \$11,016  
This is made up of an increase in freight receipts of nearly \$13,000, and incidentals of \$2,200, while in the passenger receipts there is a falling off of over \$4,000.

In Ohio & Mississippi shares we report sales of 350 shares at 11½@12. The opening passenger business of this road is, we understand, much more promising than was anticipated, and gives decided indications that the expectations of its friends will be fully realized. For Marietta & Cincinnati shares there is some inquiry, but the stock is generally held above the views of buyers; we note one sale of 200 shares at 19, 60 days. There is also more inquiry for Covington & Lexington, with sale at 20.

In Bonds the movement has been less active than last week; prices are, however, without change.

Money is slightly easier, and negotiations are made with less difficulty and at rather easier rates.

Exchange on New York is steady at ¾ to 1 per cent.

SALES AT THE NEW YORK STOCK BOARD—May 11.

\$10,000 Indiana State 5's, ..	82½
45,000 Virginia 6's, ..	91½
3,500 N. Y. Central 7's, ..	86½
6,000 Erie R. C. Bonds, 71, ..	77½
1,000 Hudson Riv. R. R. 1st Mort. Bonds, ..	97½
6,000 Illinois Central R. R. Bonds, ..	99½

1,000 Illinois Cen. Freeland Bonds, with priv., ..	93½
1,000 Chicago & Rock Island Bonds, ..	97
1,000 Harlem R. R. 1st Mort. Bonds, ..	79
200 shares Harlem R. R. stock, ..	15½
5 " Pacific Mail St. Co., ..	64
450 " New York Central, ..	86½
960 " Erie, ..	41½
500 " Reading, ..	80½
5 " N. Hav. & Hart, ..	118
60 " Mich. Cent., ..	95½
600 " Mich. S. & N. Ind., ..	63½
200 " Illinois Central, ..	134
30 " Cleveland & Pittsburg, ..	43
94 " Cleve., Col. & Cin., ..	104
50 " Galena & Chicago, ..	99
600 " Cleveland & Toledo, ..	69
25 " Wis. L. S. RR., ..	57
125 " Milwaukee & Miss., ..	68½
60 " Del., Lac. & W. R., ..	50
10 " LaCrosse & Milwaukee, ..	77½

## BALTIMORE &amp; OHIO R. R. STRIKE.

The following are the receipts for cars, as ordered by the Directors of this road, which were the occasion of the recent strike of the freight conductors. The receipt first given by the conductor at Baltimore to the agent is as follows:

MT. CLARE STATION, May 5, 1857.

Received of the Agent at this Station the following loaded and properly sealed house cars, to be conducted in my train to Martinsburg on tonnage time, with engine No. 207, viz: Nos. 10, 12, 16, 18, 20, 22 and 24.

Also, received the following loaded house cars without seals, or with seals broken loose: Nos. 11, 13 and 15.

JOHN SMITH, Conductor.

It will be seen from the foregoing that it is merely a receipt for the cars put under the care of the conductor, and stating the condition they were in when handed over to him, as to being sealed or unsealed. On reaching Martinsburg the conductor was required to deliver the same cars to the agent at that point, who receipted to the conductor for them in the following form:

MARTINSBURG, May 5, 1857.

Received of John Smith, conductor of train with engine No. 207, arriving on tonnage time this day, from Baltimore, the following loaded house cars, properly sealed, viz: Nos. 10, 12, 16, 18 and 20.

Also, received the following loaded house cars, without seals, or with seals broken loose, Nos. 22, 24, 11, 13 and 15.

For the Agent, JOHN JONES.

The operation of this simple rule would be seen plainly to be simply to show, in case seals were broken, under whose care the cars were at the time. No honest man could object to this on the score of responsibility, as in the one case he is only responsible for damage actually done while he is in charge of the goods, while in the other he may be charged with the misdemeanors of others. The authorities of the road have been amply sustained, and quiet has been restored.

## TO PRINTERS.

## Large Cylinder Hoe Press FOR SALE.

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once. Address WRIGHTSON & CO., 167 Walnut street, Cin'ti, Ohio. N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap. ap8-1m W. & CO.



[From the London Railway Times.]

**GRASSI'S SCREW LOCOMOTIVE.**

Mr. Grassi, of Milan, has patented an application of the Archimedean screw to locomotive engines, for taking trains up steep ascents. Among those who came to inspect the new machine (chiefly engineers and capitalists, who had devoted their attention to the question of working steep gradients), we are told that Captain Moorsom undertook to study the Grassi system, and to report on its practical value. This gentleman reports on the invention as follows to Messrs. G. Grassi, Velini & Co:

"Gentlemen—You having desired to know whether, in my opinion, your patent Archimedean screw may be worked by locomotive power, so as to draw with facility trains up a railway incline of one in twenty at a moderate speed, I have studied your patent as exhibited to me by your model, and have expressed to you my opinion, that your screw may be so worked as above stated. You have further desired to know by what method I would proceed to apply your invention; and as you have given me the assurance that the carrying out of the patent shall not be given to other hands than mine, I proceed to develop my method of application. I propose to construct a locomotive engine with 18-inch outside cylinders, 4 feet driving wheel, and 24 inches stroke, with boiler capacity sufficient to provide steam (with proper expansion gear) for a speed of not less than twelve miles per hour on the incline, with a gross load of not less than one hundred tons, including the weight of the engine and tender, which would probably amount to about twenty-eight tons. The engine will carry her tender upon her own frame. On the driving axle of the engine a bevelled wheel will be fixed, so as to connect by means of one intermediate motion with the crown wheel on the end of the shaft of the screw. The driving-wheel and screw revolve in exact ratio to each other, so that the screw will advance exactly as the driving-wheels advance; or, in other words, each revolution of the driving-wheel sends the screw forward 12 feet 7 inches nearly. Thus, twelve turns of the screw are made for every turn of the driver. I believe we should make about 13,000 such revolutions of the wheel per hour on the level, and that when we apply the same motive power to turn the screw on the incline above stated, of one in twenty, the steam power will overcome the additional resistance arising from gravity and friction of the machinery, at a speed not less than from one-third to one-half of that attained on the level with the same load. We have now to consider the screw in its relations to the road. I propose to make the thread of the screw to be of 13 inches diameter, winding round a cylinder or shaft of 7 inches diameter, and with a pitch of 12½ inches. The cylinder screwed will be about 5 feet 4 inches long, and will always hold two of the rollers in its grasp at one time. The rollers or pulleys will be placed 3 feet 2 inches apart from center to center; they will be about 8½ inches in diameter, and will revolve into a longitudinal balk of timber, and will be lubricated in the same way as the wheels of the carriages. The bearing timbers for the rollers will be a single line of balks about ten inches wide by eight inches deep; thus each mile will require 2,933 cubic feet of timber and 1,668 rollers. The rails will be bridge-rails, weighing 65 lbs. per yard, and screwed to balks equal to a section of ten inches by eight at the least. This road will be necessary to be thus laid

only on the up side of the incline, and is a not unusual mode of constructing the permanent way. The expenses may be stated as follows, viz:

The cost of the rollers, or pulleys and spindles, for for one mile of single track, or 1,668 rollers, will be.....	£3,336
The cost of the additional timber bearing struts, or 3,933 cubic feet of timber, at 1s. 6d., will be..	299
The cost of laying and fitting such additions, at 9d. per yard, will be.....	66

Or, total cost per mile..... £3,701

The cost of the engine, with tender and screw and connecting gear complete, in the shops in England, will be 3,000£. The rails have no additional expense to bear on account of this peculiar construction. Thus we may say that in England the total cost of one mile of railway prepared for this mode of traction will be about 3,700£. additional as compared with the expense of construction of an ordinary mile of the same railway line; and the additional cost of the engine over and above an ordinary assistant, or bank engine, will be about 500£. The result will be that such ordinary bank engine, if constructed and worked, as is usual on the best European railways, on steep inclines, would take about fifty tons of load up one in twenty, whereas this engine, constructed as above described, would take about eighty tons of load up the same incline, and no doubt a more powerful engine would take a greater load. The drawing of the engine and permanent way which accompanies the report shows the detailed mode of applying the machinery, but the right working of the details of the railway must depend on the ability and resource of the engineer in charge. You may possibly desire to know if there are peculiar difficulties to contend with in the application of this system. There are such, no doubt. The maintenance of exact action between the wheel and the screw—the friction of the rollers—the economy of the maintenance both of the engine and of the road—are three points of difficulty about which various opinions will prevail, till the system has had the test of practice. My opinion is that these difficulties are only such as the skill and economical care of an engineer well used to working inclines may successfully surmount, and it is hardly worth while to discuss the subject except with the few men who are thus circumstanced."

Captain Moorsom adds, in a later communication—"Having made known to you my opinion of your patent Archimedean screw, as capable of being applied to railway inclined planes, I would suggest your introducing it to the notice of those railway companies, both formed and in the course of forming, where very steep ascents are to be surmounted.—Thus, between France and Spain there must be a considerable extent of ground over which a great deal may be saved by the successful application of your system. The *Gioni* inclines between Genoa and Turin might be probably worked more advantageously by sixty per cent. than they now are. The Semmering inclines (respecting which I foretold M. Rothchild several years ago that he would suffer disappointment, of which letter you have a copy,) might give more satisfaction by the adoption of your system upon them."

**FOR SALE.**

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

WRIGHTSON & CO.,  
ap8-1m 167 Walnut street, Cin'ti, Ohio.

**Railroad Iron.**

2000 TONS RAILS, Erie pattern, weighing about 56 lbs. per yard, in port and to arrive; for sale in lots to suit purchasers, by

my8-1m

M. K. JESUP & CO.,  
44 Exchange Place, New York.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

**BUSH & LOBDELL**

Wilmington - - - - - Delaware.

MANUFACTURERS OF

**CHILLED WHEELS**

AND

**TIRES,**

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

**CELEBRATED WHEELS,**

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

**WHEELS FITTED**

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

**Most Reasonable Terms.**

ao23

**W. G. HYNDMAN'S****Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

G. W. MORRILL.

G. B. BOWERS.

**MORRILL & BOWERS,**

(Successors to and members of the late firm of C. W. A. SON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

**Railroad Cars of Every Description.**

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

ap16



# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes. **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

**JAMES J. BUTLER, Agent.**—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly, **J. REED, Clerk.**

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally. **J. J. BUTLER.**

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

**JAMES H. MORLEY, St. Louis, Mo.**  
**Or SUMNER SMALL, Boston, Mass.**

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

**CHARLES ELLET, Jr., Civil Engineer.**

No. 299 H Street, Washington, D. C.

ap12

### Thorough Bred Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

### SHORT HORN BULL,

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.

### ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

### Blank Book Manufacturers, No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

### RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ordering done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

**ANDERSON, GATES & WRIGHT,**  
(SUCCESSORS TO JACOB ERNST.)  
112, Main Street, Cincinnati.

### Union Works, Baltimore.

### POOLE & HUNT,

### Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

### Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS and AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAPING, PULLES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap:3

### SILVER, GOLD, LEAD,

And Other Minerals.

ON THE PROPERTY OF THE

### Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico: It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

**EDGAR CONKLING, Ag't for the Company,**  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

### Norris' Locomotive Works.

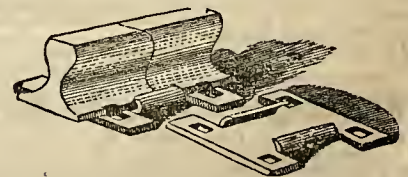


PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. j:27. **RICHARD NORRIS & SON.**

### RAILROAD SPIKES.



WROUGHT IRON

### Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch. **J. HOPKINSON SMITH**

No. 25, South Charles

Please direct the name in full.  
Baltimore August 31st



## Racine and Mississippi Railroad.



### Open to Allen's Grove.

ON and after FRIDAY, August 8th, the trains will run to Allen's Grove; and returning, will leave Allen's Grove at 7 o'clock A. M. and 12.30 P. M., connecting at Racine with all trains on the Lake Shore Railroad, North and South.

### ON THURSDAY, Aug. 14th,

The trains will run to Clinton, there intersecting the Chicago, St. Paul & Fond du Lac Railroad to Chicago.

Trains will leave Clinton at 6.30 A. M. and 12 M. until further notice, making regular connections at Racine.

### STAGES FOR BELOIT

Will connect with all trains at Allen's Grove and also at Clinton.

UPA Steamer leaves Racine for Chicago every evening at 10.30.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President, aug14  
ROBERT HARRIS, Ass't Sup't.

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

### MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Is, engraved in a style corresponding in excellence with that of Bank Notes—

### RAILROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all proposals made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
at 12 Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan-ry] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

### Railway Supply Agency

No. 22-1-2 Walnut, and No. 11 Granite St., PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts. Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-ly

## E. MENDENHALL,

### MAP, BOOK & PRINT SELLER;

Has constantly on hand GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, and OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES DRAWING INSTRUMENTS, &c.

Publisher of the

Railway Map of the Western States,

In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON CO. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

MAPS OF EVERY DESCRIPTION. mh22

## Important to Railroad Companies, etc.



### Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

### RAILROAD FROG-POINTS,

### Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated beats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cincinnati. N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

### ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOY'S METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles CHAS. W. COPELAND, Consulting Engineer, 64 Broadway, N. Y.

Nov

## W. E. ATKINSON,

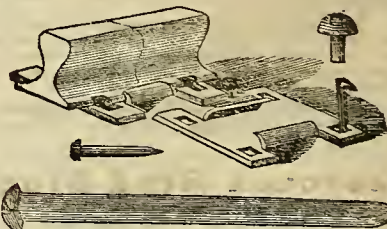
Civil Engineer, Surveyor & Draftsman. CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mar1-ly

### GREAT WESTERN

### Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full. feb 28 CORBY, GOSSIN & Co.



## Most Direct Route to the East.

### BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is tho

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FRIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
Julio Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:16 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK,

Superintendent Terre Haute & Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducting. Sold at wholesale at great discount from list prices.

cc23-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.



EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17 H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Om nibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Om nibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Clin. and St. Louis Omnibus L.

Office No. 2 Burnet House.

Jan 2

1856.

1857. Spring Arrangement. 1857

## Cincinnati, Hamilton & Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

### FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

### SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M.; connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

"STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

### THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

### FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburg Philadelphia, &c. Same train connects at Sandusky for Cleveland, New York, Boston, &c.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

### RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M. For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or at the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU & INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Frtght. Ag't.

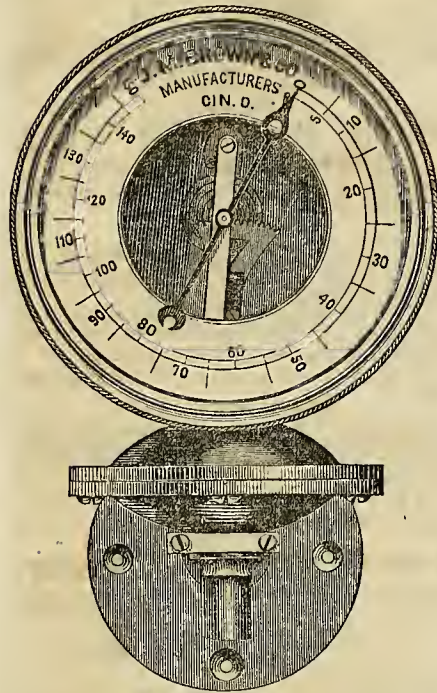
Indianapolis, Sept. 16, 1856.

[mb29-1v.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR

### LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.  
mar26



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

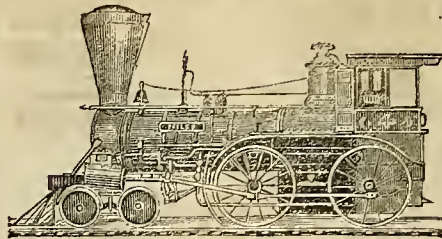
Every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmiths' Tugers.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

### A. B. LATTA'S

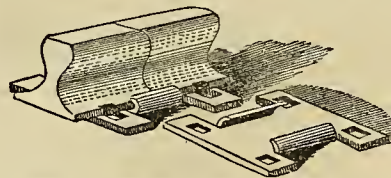
#### Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

apl7 A. B. & E. LATTA.  
J. D. GREEN, C. S. GREEN.

### CINCINNATI RAILWAY



### CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

#### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.  
J. B. GREEN & BRO.

Feb. 14 ly.

### THE SCHENCK MACHINERY DEPOT

AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

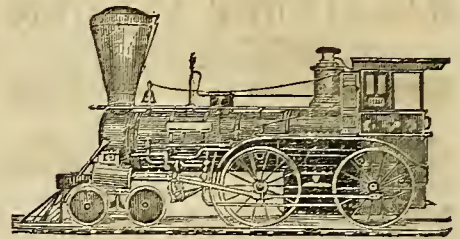
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

#### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR  
Ang. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices: Car  
Hand, and Signal Lanterns.

Cotton Duck for Cr Covering ,  
Of any required width to 124 inches.

### ENAMELLED HEAD LININGS Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trun-  
nings for win dows and Seats. Varnish, Coach Japan  
and Glue; Pal nts, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

#### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
†oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mills, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

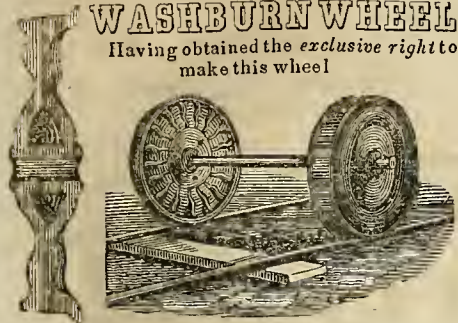
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEAL. (The highest prize) awarded to these pumps and a Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855 1



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL,

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

## DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 16<sup>th</sup> JOSEPH DAVENPORT.

## S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2<sup>d</sup> NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or  
Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of ALBERT M. SMITH, Patentee and Manufacturer, dec20-ly 13 North St. Paul st., Rochester, N. Y., or TAULMAN & LOW, 157 Broadway, N. Y.

## ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.,

D. D. MILLER,  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

## RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by E. MENDENHALL,  
31, 35<sup>th</sup> 3 College Hall, Cincinnati O.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by  
VOSE, LIVINGSTON & CO.,  
9 South Winam street, N. Y.

THOMAS D. STETSON,  
Mechanical Engineer,  
AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.  
Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc23

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
President of the Board.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by  
VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

THEODORE DEBON,  
no13 10 Wall st., near Broadway, New York.

## IRON BOILER FLUES, PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,

1 1/2 to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES, From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. GOODMAN & CO.,  
no. 7 Wall st., N.

## RAILROAD CAR

## COACH TRIMMINGS.

## DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush;

Printed & Ucent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars;

ROPE MATTING, Every Width.

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT,

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON.

## RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feh5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feh5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1866.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, JR.,

dec11 Second avenue, corner of 22d street, N. Y.

**T. F. RANDOLPH & BRO.**

Mathematical Instrument Makers,

N. W. Cor. 5th &amp; Walnut sts.,

CINCINNATI, O.

Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR

RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened, the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
No. 14 Main street, Cincinnati, O.

dec. 11

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

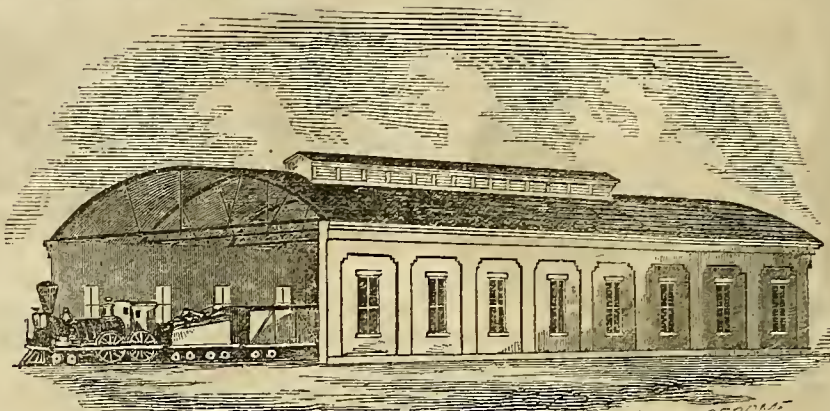
MIDDLETON, WALLACE &amp; CO.,

jan8-ly 119 Walnut st., Odd Fellows' Building

# Moseley's

## TUBULAR

# WROUGHT IRON ARCH ROOFS.



Office, No. 57 West Third Street,  
CINCINNATI, OHIO.

The supporting parts of these roofs are made in the same manner as Moseley's **TUBULAR BRIDGING**. The tubes are light and of immense strength, capable of bearing twenty times more burden than will ever go upon them. Such roofs can be built in less than half the time, weigh much less, and cost less than any plan of Iron Supporting now in use, and no more than good wooden Trusses; besides, this plan of roofing gives a fine architectural appearance. Is *all* iron, and proof against injury to walls, etc., by expansion and contraction. We are prepared to manufacture roofing, after this plan, of any size and span, in any and all parts of the country, on the shortest notice.

THOS. W. H. MOSELEY, Supt. and Engineer.

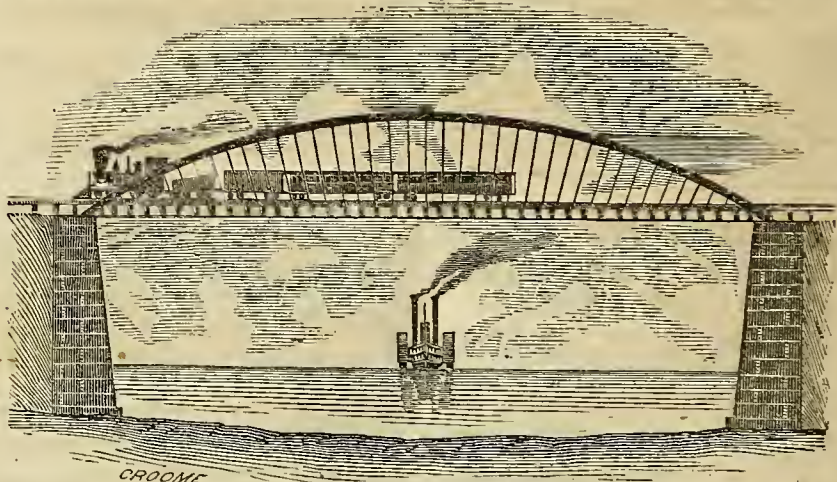
MOSELEY, WINSTON &amp; MOSELEY.

January 1st, 1856.

JOHN BANDON &amp; CO., SPECIAL CONTRACTORS.

# MOSELEY'S

## TUBULAR, WROUGHT IRON BRIDGE.



Office No. 57 West 3d Street, Reeder's Building, 2nd Floor, Cincinnati, Ohio.

These Bridges are made exclusively of the best Charcoal Wrought Iron. Their principal bearing or support parts, being *made* iron triangular tubes. Including the wood work or floor, the Bridge will bear, when well made, sixty times its own weight of burden. We are prepared to construct and erect our Bridges in every part of the U. S., the Canadas, &c., with single spans up to 2000 feet (though in long bridges with single spans the increase of cost is very great,) and the cost of ordinary span is not a large per cent over first class wooden Bridges. A Bridge of 50 feet and less of span, we can construct in three days' time, and when it is on the ground and ready for placing in position, we require but a few hours to remove the old one and place the new one complete in its stead. Our work is all warranted, and the warranties sustained by *responsible* obligations.

We want good special Partners in every State, the Canadas, &c., with whom we will contract on easy terms and furnish in all cases, the Bridges ready to go.

THOS. W. H. MOSELEY.

Principal Superintendent and Engineer



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....MAY 21, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " per month .....	3 00
" " six months .....	12 00
" " per annum .....	20 00
One column, single insertion .....	4 00
" " per month .....	10 00
" " six months .....	40 00
" " per annum .....	80 00
One page, single insertion .....	10 00
" " per month .....	25 00
" " six months .....	110 00
" " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers, and Proprietors,

### CONTENTS.—NO. 13.

#### EDITORIAL.

The Day of High Prices—Influence of Railroads.....	193
Railroad Supply Agency.....	193
Fort Wayne Western R. R.....	193
Municipal Subscriptions.....	194
Canadian Railroad Legislation.....	194
Brevities.....	194

#### RAILROAD DAQUERROTYPES.

Central Southern R. R.....	195
----------------------------	-----

#### RAILROADS.

Cincinnati, Hamilton & Dayton R. R.....	195
Marion & Mississinewa Valley R. R.....	197
New Orleans & Baton Rouge R. R.....	198
Great Russian R. R.....	202
Baltimore & Ohio R. R.....	202

#### MISCELLANEOUS.

The Hoosac Tunnel.....	198
Progress of the Railway System.....	198
Russia—The Imperial Scheme.....	198
Important Decision.....	199
Railway Security.....	202
Land Damages.....	202

#### EARNINGS.

Cleveland & Toledo R. R.....	201
Michigan Central R. R.....	201
Pittsburg, Fort Wayne & Chicago R. R.....	201
Cleveland & Pittsburg R. R.....	201
Baltimore & Ohio R. R.....	201
Lake Erie, Wabash & Western R. R.....	201
The Georgia R. R.....	201

#### MONETARY AND STOCKS.

Table of Stocks and Bonds.....	200
London Quotations.....	201
Cincinnati Stock Sales.....	201
Monetary and Commercial.....	201
Sales at the New York Stock Board.....	201

RAILROAD SUPPLY AGENCY.—Our readers will find in our advertising columns the notice of a railroad supply agency, by John W. Kelly. We would invite their attention to this establishment. Mr. Kelly advertises for sale all material used in the equipment or repairs of railroad engines and cars.

### THE DAY OF HIGH PRICES—INFLUENCE OF RAILROADS.

In the valley of the Ohio no such period of high prices, both relatively and absolutely, was ever known. The prices which obtained in 1856 were high in comparison with those of any previous period, but were but a little over half the prices of May, 1857. The comparative prices are as follows:

	August, 1856.	May, 1857.
Flour.....	\$ 5 00	\$ 7 00
Mess Pork.....	15 00	23 00
Corn.....	35	75
Oats.....	30	75
Sirloin Beef.....	10	15

The general average of advance is full 60 per cent. Something of this is due, undoubtedly, to the prolonged winter, and to a general shortness of crops; but a far more efficient cause is the *relative* diminution of the agricultural population, and the *relative* increase of civic, or consuming population. If we may suppose, for example, that in 1840 the agricultural population of Ohio stood to the town as 60 to 40, and that in the seventeen years to 1857 the increase (about 800,000) was 20 per cent. greater of the *town* population than of the agricultural, then we shall have this result:

	Rural.	Civic.
In 1840 .....	900,000	600,000
In 1857 .....	1,220,000	1,080,000

In 1840 the rural population was 60 per cent.; in 1857 it is 33 per cent. That is, the *relative* proportion of producers has been reduced 7 per cent., and the relative proportion of consumers increased 7 per cent. Something like this has actually happened, and the progress of Ohio is very nearly represented by the above figures. But this process is not confined to Ohio—it has gone on in all the large producing States. In New England, New York, New Jersey and Pennsylvania the town population has been increasing at a more rapid rate than in Ohio.

This is the general fact, and it is, in our estimation, that which has had the most influence in advancing prices.

In this state of things, some persons have supposed that the railroads have caused high prices, and it is worth while to inquire what is the real influence:

1. It is plain that railroads *create* nothing. If there is a million of bushels of wheat in the country it is plain a railroad cannot make another bushel. It can add nothing to the amount of food in the country.

2. But, if this million of bushels of wheat were an hundred miles from the market, and there were previously nothing but wagon roads, it is obvious that the *price of transportation* would be much less. The reduction in the transportation of wheat would be at least 35 cents a bushel.

3. But, notwithstanding this reduction of the *cost of carriage*, there is no reason why the price of wheat should fall at the market city; for the reason that the *price* of the article does not depend on the cost of transportation,

but on the relation between the *quantity*, of wheat and the consumers. Hence, we see that the *market price of products* has never been reduced by railroads. This has surprised many people; but the reason is obvious: The *price* of a bushel of wheat does not depend upon whether it came to market on a railroad, a canal, or a turnpike; but upon how much there is in market to sell.

4. Where, then, goes this 35 cents per bushel, which, in the case supposed, has been saved by railroad transportation? It has gone to the *farmers*. The farmer has gained, but the citizen has not lost.

5. But, in one respect, railroads have tended to *enhance prices*. This is by the great number of men they have taken from other employments. These are a clear addition to the number of consumers. Hence they, like towns, so far tend to diminish the number of producers. This is the only influence railroads can possibly have in enhancing prices.

6. But, on the other hand, they do exert a powerful influence in increasing production. It is in this way: Take the case we put of a million of bushels of wheat, at an hundred miles from market, with nothing but a wagon road. Now, the moment the railroad is made, and the freight cars running, this wheat is worth 35 cents a bushel more to the farmer than it was before. Now, in a country like this, where there is abundance of unoccupied land, this is a premium for the production of wheat. The city price is not reduced, but the *farmer's price* is largely raised. This 35 cents a bushel, therefore, is a *premium* for the production of wheat. It is *three hundred and fifty dollars* on a thousand bushels. It follows inevitably that a great deal more wheat will be raised; and the tendency of that is to reduce the city prices.

In reviewing what we have said, the conclusion is that the railroad, as a mere machine to transport products, has no influence on prices; that, as an employer of large numbers of men, its tendency is to enhance prices; but, as increasing the farmers' profits, its tendency is to increase production, and then diminish prices.

Taking these influences all together, it is probable that railroads have had very little influence either way on the market prices. They have given great facilities to merchants and profits to farmers, but the causes which influence prices are beyond them. High as all prices of food are, we can see no chance of reduction, except by *increasing production*. How shall this be done? This is one of the great problems of the day.

FORT WAYNE WESTERN R. R.—We understand that Mr. Schenck, president of this road, has made a contract with Wm. W. Redfield, Esq., for the grading, bridging, ties and iron of this road, from Ft. Wayne to the western border of Indiana, 125 miles.



## MUNICIPAL SUBSCRIPTIONS.

The validity of subscriptions to railroad companies by municipal corporations, as towns, cities and counties, is an interesting question, especially in the Western States, where they have prevailed to a great extent. These organizations, without special legislative authority, could not make such subscriptions, and no instance has come before the courts in which they have attempted to embark in such enterprises. But it has been very generally held that the Legislature, when not specially prohibited by the State constitution, may, in the exercise of its taxing power, authorize these municipal corporations to subscribe to the stock of railroad companies, and to issue bonds and to levy taxes for that purpose. Subscriptions to railroad companies by towns, cities and counties, when so authorized, have been declared valid by the courts of Connecticut, Virginia, Pennsylvania, Ohio, Kentucky, Tennessee, Missouri, and recognized in Illinois and Mississippi. Dissenting opinions were, however, given in some of these cases, as in Pennsylvania and Kentucky. The Supreme Court of New York is the only one which has denied the validity of the subscriptions, in the recent case of *Clarke v. City of Rochester*, for the reason that levying taxes for the purpose of meeting them is beyond the scope of legislative power to tax; but this decision stands alone, and may be overruled by the Court of Appeals.

It is customary for the Legislature, in authorizing municipal subscriptions, to submit the question to the voters of the district to be taxed for the purpose, whether the subscription shall be made—and, on a majority of votes being given in its favor, to require the corporate authorities to make it, and to issue bonds or levy the necessary taxes. With the exception of New York, in the case already mentioned, the submission of the question has been uniformly sustained, and held not to be an unauthorized delegation of legislative power. Such a course has been sustained in Kentucky, Ohio, Pennsylvania and Missouri.

The oppressive burden which these municipal subscriptions have imposed on communities, have induced constitutional restrictions, denying to the Legislature the power to authorize them in Ohio and Kentucky; but in both States the restriction has been held not to apply to subscriptions which, although not already consummated, were authorized by the Legislature before the constitution went into operation.

## CANADIAN RAILROAD LEGISLATION.

The Canadian Parliament has been recently occupied in investigating charges of corruption in some of the leading railway schemes of that province. The investigations, thus far, exhibit an alarming state of things, and one to which we know of no parallel in the worst instances which have disgraced our own system. The *Toronto Colonist* gives the following history of the progress of the Woodstock & Lake Erie R. R.:

"When the stock books of the Woodstock & Erie Railroad were first opened, it appears

that Col. Light, of Woodstock, took £60,000 of stock, Wm. S. Light £27,000, R. N. Light £29,000, upon all of which the books show nothing was paid. Mr. Henry DeBlaquiere also took £27,000 of stock, upon which nothing appears to have been paid; and Mr. H. C. Barwick, D. S. McQueen, Edmund Deedes, Richard D. Elwes and H. L. Turner took the entire balance of the stock—namely, £250,000—upon which, like the rest, nothing was paid. Mr. Hincks took £250 of stock, and he seems to have been the only person who paid a penny at the time; for he paid on his subscription, which, from its smallness, would seem to have been a *bona fide* one, five per cent.

"In this state of matters, Messrs. Hincks, Farmer, DeBlaquiere, Barwick and W. S. Light were elected, or elected themselves, Directors. It would appear, from evidence, that Mr. Hincks was made eligible by Mr. Barwick taking £250 stock in his name; and that he was subsequently elected President. No calls were ever made on the stock. Mr. Hincks resigned the Presidency shortly after his election, when Mr. Farmer was elected in his stead. Subsequently, and after, we believe, some change in the act, Messrs. Hincks, Farmer, DeBlaquiere, W. S. Light and Mr. Deedes were elected Directors by themselves; and they paid, or entered as paid in the books, £50 each on their stock. There were two vacancies left in the Board for Directors from the municipalities which they designed to get into the scheme, and which, in reality, they intended should pay all the money, since they paid what amounted to nothing themselves in proportion to their stock—if some of them actually even paid anything at all.

"In this stage of proceedings they employed a Mr. Landon, who is either a Baptist Preacher or an Elder, to visit the municipalities of Norwich, Windham, Simcoe and Woodhouse, to canvass for stock. They represented, according to the evidence before the committee, that they were a regularly and properly elected and organized Board of Directors, and that they had £250,000 of stock subscribed, £60,000 of which was represented as available to commence the road. The proposition, indeed, made to the municipalities, was that their stock should not be used till £60,000 of the stock of the private stockholders was first expended. They finally succeeded in getting £50,000 of stock taken by the municipality of Windham, £25,000 taken by Simcoe, £25,000 by Woodhouse, and £20,000 by Norwich.

Then commenced the business operations. A contract, wholly irrespective of the agreement with the municipalities, was entered into with Mr. Zimmerman to construct the road; and Mr. Henry DeBlaquiere, one of the Directors, received thirty thousand dollars in cash from him for getting him the contract, and also took his agreement or obligation for twenty thousand dollars more, which latter claim is now, we understand, referred to arbitration. Meantime, not a shilling more stock was paid by the interesting stockholders or Directors, and the municipalities' money was of course the entire stock in trade of the company. Next, Col. Light was paid £1,484 for services, &c., in getting the original charter; and Mr. Henry DeBlaquiere was paid £5,000 for a brick yard for the use of the company, which, it is alleged, cost him £200."

The charter of the Woodstock & Lake Erie R. R. was an important one, as controlling the great Southern Line. The late Sam'l Zimmer-

man was anxious to effect a union between this company and the Amherstburg & St. Thomas Railroad. This was agreed to be brought about by Mr. Rankin, a member of the Provincial Parliament, for a share in the contract for building the road, for which share Mr. Zimmerman reserved the right to pay Mr. Rankin £25,000 (\$100,000). Mr. Rankin subsequently coquetted with Mr. Buchanan, on the part of the Great Western Railroad, and demanded £50,000 to bring about the same arrangement in favor of that road. He subsequently introduced in Parliament a bill for another through line. Mr. Rankin then preferred charges of corruption against Mr. Buchanan; and it is the investigation of these charges that has revealed Mr. Rankin's complicity in the matter.

It is much to be regretted that the Canadian Railroad system should thus early have made the scene of the reckless and interested operations of mere speculators. Railroads are the great want of Canada, and whatever impedes their construction will necessarily blight her prospects.

ROBERT J. WALKER.—We observe the name of this gentleman at the head of the list of incorporators of the Minnesota Western R. R. as given in our last issue. The proposed object of the M. W. R. R. is to build a road from Stillwater via St. Paul and St. Anthony to the Western Border of Minnesota, and they have a right to construct a branch to Red River (of the north.)

Mr. Walker has been so long identified with the Southern Pacific project that we somewhat wonder to see his name connected with that of a road which must without doubt be aiming at the passage of the Rocky Mountains in a different latitude. Mr. Walker should explain his connection with this new undertaking.

## BREVITIES.

SAVANNAH, ALBANY AND GULF R. R.—This road is now completed and running as far as Walthonville. On the 6th of May, the ladies of that place, gave a wild wood picnic to the Directors and other invited guests, in honor of the completion of the road to that point. It is described as a very pleasant affair.

PENNSYLVANIA MAIN LINE.—The bill for the sale of the Main Line of Public Works in Pennsylvania has passed both houses.

BALTIMORE AND OHIO R. R. EXTRA DIVIDEND.—It is proposed to issue certificates of stock to parties entitled to the extra dividend, in place of certificates of indebtedness.

BALTIMORE AND OHIO R. R. STRIKE.—The Board have resolved to give an extra month's pay to the men, who took out the trains during the recent riots, and in no case to re-employ those who were engaged in the strike or riots.



**ILLINOIS RIVER R. R.**—The graduation, bridging, masonry, and ties, of the Illinois River Railroad, have been let.

**JOLIET AND CHICAGO R. R.**—The following named gentlemen have been elected Directors of the Road: S. A. Matteson, R. B. Mason, T. B. Blackstone, and Geo. Bernet.

At a subsequent meeting of the Directors, Geo. Bernet was elected President, and T. B. Blackstone, Engineer.

We are informed that the road is to be constructed forthwith, and will probably be in running condition by the first of October next.

The receipts of the Michigan Central Road for the first week of May were \$61,095 29, against \$69,413 71 last year.

## Railroad Daguerreotypes.

No. LXXXI.

**CENTRAL SOUTHERN R. R.**

OFFICERS.

President—THOS. BUFORD, Lynnville, Tenn.  
Treasurer and Secretary—JOHN BAIRD, Columbia.

DIRECTORS.

R. B. MAYES,  
W. J. DALE,  
WM. GALLOWAY,  
W. S. FLEMING,  
JNO. BALLANFANT,  
THOS. MARTIN,  
BENJ. CARTER,  
GILES A. REYNOLDS,  
S. H. STOUT,  
THOS. J. BROWN,  
TYRSE RODES,  
THOS. M. JONES,  
THOS. K. GORDON,  
NEWTON WHITE.

The ANNUAL MEETING of the stockholders is held on the first Wednesday in November.

Length of road.....49 miles

Termini.....Columbia and Alabama line, in direction of Decatur.

**REMARKS.**—The Central Southern Railroad runs from an intersection with the Tenn. & Ala. Road, near Columbia, to the Alabama State line, in the direction of Decatur; it there unites with the Ala. & Tenn. Central Road, whose other terminus is Montevallo.

This latter road is under contract and in process of rapid construction from its junction with our road to Decatur. Our own road is under construction to Pulaski, and the balance will soon be let to contract.

The first connection anything like direct between Nashville and Memphis will be in this direction; and when the Ala. & Tenn. Central is finished to Montevallo, and the Mobile & Selma Road to Mobile, one glance at the map will show you what an important line of road this is a link in.

It is confidently hoped and expected that Alabama will wake up in regard to internal improvements at the meeting of her next Legisla-

ture; and, if so, these roads will soon be put through.

Our Board of Directors have as yet made no published report; I send you, however, our charter and report of preliminary surveys and estimates. Very respectfully, yours,

JOHN BAIRD.

## Railroads.

**CINCINNATI, HAMILTON & DAYTON R. R.—SEVENTH ANNUAL REPORT.**

"Since the last Annual Report the business operations of the company have progressed without material change from the previous year. The gross receipts show a fair increase. They are as follows:

For year ending March 31, 1857.....\$555,709 13  
For year ending March 31, 1856.....508,271 71

Increase.....\$47,437 42  
The receipts of 1857 show an average earning per mile of \$9,361 81.

The number of passengers carried during the  
Year ending 31st March, 1857, was.....362,630  
Year ending 31st March, 1856, was.....352,151

Increase.....10,479

"During the past year two dividends of three and one-half per cent. each have been paid to the stockholders in cash; and the present business of the road warrants the belief that regular semi-annual dividends will continue to be made. For detail statement of the earnings, expenditures and financial condition of the company, reference is made to the Tables of the Secretary.

"The net earnings of the road during the past year have been chiefly from local business, the profits on through freights amounting to a small sum, comparatively, in consequence of the very low rates established by other railroad companies terminating in Cincinnati, whose anxiety to monopolise all of that description of traffic has led them to reduce prices below a fair remunerating point.

"The local business of the road is steadily on the increase, especially in freights—and this branch will always have first attention and accommodation.

"A reference to the tables exhibiting the earnings of the road from the time it was first in operation, will show that the receipts from passengers continued to increase until they had reached, for the year ending March 31, 1854, \$274,650 39; since which period they have gradually decreased to \$231,571 54, for the year ending March 31, 1857.

"This reduction is attributable to the opening of the Cincinnati & Indianapolis Railroad, and of roads north of Cincinnati. The increase of local travel, however, has gone steadily on, and prevented a heavier reduction in passenger receipts than would otherwise have been the case. The lowest point of reduction, we think, has been reached. There are no more roads in progress of construction that will injuriously affect the travel on our road. On the contrary, several connecting roads are soon to go into operation, for a

greater distance, that will much more than bring back our passenger earnings to their highest point. For the past two months the receipts show a decided increase on the corresponding months of last year.

"While our passenger earnings decreased the freight earnings have increased in a greater ratio, showing a total gain. It will be seen by reference to the tables that the freight earnings, including mails and express, were for the year ending March 31, 1854, \$188,371 06—and for the year ending March 31, 1857, \$286,762 49.

"On many of our Western, and some of the Eastern roads, the same results have been experienced, produced by like causes.

"We may give an instance, on one of the most successfully managed railroads of the West:

"For the year 1853 the earnings of the Cleveland, Columbus & Cincinnati Railroad, as appears by their published reports, were:  
On Passengers...\$392,419 89—On Freight...\$464,978 06  
For 1856:

On Passengers... 398,358 62—On Freight... 827,311 87

Loss.....\$194,061 27—Gain.....\$362,333 81

"The stockholders, at their last annual meeting, recommended a sale of a portion of our second mortgage 7 per cent. bonds of one thousand dollars each, at eighty cents on the dollar, for the purpose of discharging the floating debt of the company. The sale was effected during the past summer, at the price named, and the debt has been nearly discharged. The means are provided to pay the remainder as fast as it matures. Provision must be made by the 1st of September next to pay the scrip issued for dividend No. 5, which will then amount to \$116,650, including interest.

"At the annual meeting of stockholders in May, 1855, a resolution was passed instructing the Directors to create a sinking fund, for accumulation and the ultimate redemption of the bonds of this company. This resolution was to take effect from the first day of January, 1856. In compliance with its terms, seventeen of the first mortgage bonds, of one thousand dollars each, have been purchased and cancelled.

"The real estate account of the company has been increased within the past year, mainly for the purpose of securing ground to make a connection of our tracks with those of the Ohio & Mississippi Railroad Company. The present value of the real estate of this company is not less than half a million dollars. Much of it has been obtained with a view to accommodating the business of connecting roads, from which a fair income may be derived, together with an increase of business upon our own road. If not thus disposed of within a year or two, a portion may be sold at a large profit.

"The necessity of adequate and comfortable passenger depots at Cumminsville, Ham-



ilton and Dayton, was noticed in our last report. Since then that necessity has been supplied by the erection of depots at a total cost of thirty-five thousand dollars. The depot at Dayton is built of brick, eighty by two hundred feet, with all the improvements and conveniences consistent with proper economy. It is used by the Mad River & Lake Erie, Dayton & Michigan and Greenville & Miami Railroad Companies, in common with this company, and a charge is made for such use. The depot at Hamilton is thirty by one hundred feet, built substantially of brick, and accommodates this company, in connection with the Eaton & Hamilton Company, for which a charge is made to the latter company. The Cincinnati & Indianapolis Junction Railroad Company will also use this depot when their road is completed. The depot at Cummins-ville is built of brick, two stories, twenty-five by fifty feet, with a wing, and is constructed for the purpose of accommodating our local travel, and our Agent as his residence. A freight depot thirty by one hundred feet has also been erected at Hamilton during the past year.

"The construction account has been increased within the past twelve months, by the purchase of new rails, the erection of additional depots, preparing the ground for the same by grading, extension of sidings, and the charging up the discount on bonds sold—the latter item being more than half of the whole amount charged to construction since last report.

"The road is now amply and fully provided with the necessary depots, and there will not be much call for further expenditures to be charged to construction.

"The past winter was one to be remembered for many years by our citizens. The Ohio river closed early, leaving our city poorly supplied with fuel. For weeks there was much suffering in consequence of this want of fuel. The several railroad companies were appealed to for aid by the citizens in public meetings, and by the City Council. This company contributed its share towards furnishing relief, having transported of wood and coal, free of charge, for charitable distribution, a large amount, the freights on which, at regular rates, would have been over four thousand dollars.

"No accident has occurred on the road during the past year by which any passenger has been injured. In this respect there is continued cause for congratulation.

"On the 21st of October last the first collision of trains resulting in injury occurred on this road. It was between a wood and an extra freight train. By this accident one laboring man was killed and several others badly injured.

"Within the past six months we have introduced on our passenger trains Loughridge's

Patent Car Brake. It has proved to be a very valuable improvement, insuring greater safety, as well as economy, in the running of trains.

"The present working condition of our road and machinery is good. Within the past year we have had five hundred tons of rails re-rolled at the Covington Mills, and have contracted for a like quantity for the present year. Besides this expenditure, it is found necessary to keep three forges in operation in our shops, repairing the ends of rails.

"The steamer St. Lawrence is still held for sale. She has been recently chartered to the Southern Michigan Railroad Company for a few months, on terms satisfactory. An insurance is to be effected on the boat by and at the cost of the S. M. R. R. Co., for sixty thousand dollars, for the benefit of the owners.

"About the beginning of the present year a change was made in the duties of our active managing force. In consequence of the resignation of Mr. H. O. Ames, the office of General Superintendent has been suspended for the present, and that of Superintendent of Trains and Motive Power created. The management of the trains is now under the charge of Daniel McLaren, who has proved himself well qualified for the duties by many years' experience. The other duties of the General Superintendent have been assigned to Ira Wood, our Master of Transportation. These gentlemen have both been engaged in the business of our road since it was first opened, and are familiar with all its details. The new arrangement has worked with success and harmony, and, it is believed, will give more general satisfaction, and be productive of as much efficiency and of more economy.

"Mr. H. O. Ames has been connected with the management of our road from the day it was first put in operation, and has filled at different periods the offices of Secretary and Superintendent. The system of accounts which he has introduced in the various departments is simple, comprehensive and exact, and furnishes ample checks. Many of our first-class Western roads, after thorough examination, have adopted the same system. The running arrangements of the road, and the freedom from accidents for which it is noted, entitles him to much credit. In parting with Mr. A. the Board take occasion to express their high appreciation of his integrity, and to add assurances of their warmest wishes for his future usefulness and welfare.

"The prospect for an increase of business from connecting roads is more favorable now than at the period of our last report.

"The arrangements of this company, in connection with the Mad River & Lake Erie and Cleveland & Toledo Companies, are more complete for a through passenger and

freight business than they have heretofore been. The embarrassments which we have labored under for the last two years at Cleveland have been removed by the Cleveland & Toledo Company becoming joint owners or participants with the Cleveland, Columbus & Cincinnati Company in all the facilities of the double track between Cleveland & Grafton, and of the depots in Cleveland. A contract has been made between the Cleveland & Toledo, Mad River and Lake Erie and this company, for a through line between Cincinnati and Cleveland, for both freight and passenger business. The contract provides for each company furnishing its proportion of freight cars, thus avoiding transshipment of merchandise, and securing greater safety and dispatch. The facilities for lake transportation, in connection with our roads, both from Cleveland and Sandusky, will be more ample than heretofore. The receipts from through Eastern business the past year were \$75,747 54, showing an increase of fifty per cent. over the previous year, and they will probably show like increase the present year.

"The Ohio & Mississippi Railroad, just opened, will doubtless bring to our city a large number of passengers and a large amount of freight, of which we expect to receive a share. The relations of this company towards that important railroad company are friendly; and the proximity of the two roads, entering the city together, and terminating within a few hundred feet of each other, gives advantages that we are fairly entitled to enjoy. In view of the importance of this business, we are now encountering the expense of connecting the tracks of the two roads.

"The Cincinnati & Chicago Road, which connects with us at Hamilton, through the Eaton & Richmond Road, we have assurances will be opened through to Logansport during the month of June next. But a few miles of iron remain to be laid, and we are now transporting that over our road. When the road opens we may expect a large increase of business to and from Logansport and the Wabash Valley, both in passengers and freight.

"The work on the Cincinnati & Indianapolis Junction Railroad, which also connects with our road at Hamilton, has gone steadily on for the past year, and we have assurances from those connected with it that it will be opened to Connersville within the period of another year. This road passes through an old settled, populous, fertile and wealthy country, and the expectations of its friends are that it will do a large business.

"The work on the Dayton & Michigan Road, which connects with our road at Dayton, has been pushed forward rapidly the past year. The completion of this road is now in the hands of enterprising capitalists, able to carry the work successfully through. The road is now in operation to Sidney, and



we are assured that within a year we may expect to see it completed to Toledo. The business on that part of the road now in operation is rapidly increasing, and, when the line is extended as far as Lima, will furnish us our shortest and most important connection with Chicago, through the Pittsburg, Ft. Wayne & Chicago Road, of uniform gauge from Cincinnati to Chicago. This route will vary but little in distance from the present one by Lawrenceburg and Indianapolis, and until the more direct one by the Cincinnati & Chicago Road is completed to Chicago, will probably be the favored one by the public. The Dayton & Michigan Road, when completed to Toledo, will open to us the shortest railroad route to Detroit, and bring to our city a large amount of business that for a number of years has been finding its way to Louisville by the Michigan Central and New Albany & Salem Railroads, and to Cincinnati by way of Cleveland. It will also open up an important connection to North-Western Michigan, over a road about completed from Detroit to Grand Haven, on Lake Michigan, opposite Milwaukee, distant one hundred and eighty-five miles from Detroit. The connection through Detroit with Canada West will be the most direct, and a largely increased business may be expected through the Great Western and Grand Trunk Railroad between Cincinnati, Montreal and Quebec. The road from Toledo to Detroit is expected to be fully open for business by June or July next; and, until the Dayton & Michigan Road is finished to Toledo, the route by the Mad River & Lake Erie and Cleveland & Toledo Roads will furnish the shortest and best railroad connection with Detroit."

The following are the officers of the Cincinnati, Hamilton & Dayton Railroad Company, elected for 1857:

*Directors*—S. S. L'Homedieu, President; Geo. Carlisle, Vice President; John C. Wright, Andrew Gross, Wm. Resor, George H. Hill, S. C. Parkhurst, John W. Ellis, Cincinnati; Joseph B. Varnum, New York.

*Treasurer*—Ohio Life Insurance & Trust Company.

*Secretary*—F. H. Short.

*Superintendent*—Daniel McLaren.

*Master of Transportation*—Ira Wood.

#### MARION & MISSISSINewa VALLEY R. R.

This little road has not escaped the difficulties which have attended the construction of many works of larger character, the history of which we shall give in the language of the Report just issued:

"It will be seen, by the Secretary's statement of the accounts herewith presented and made part of this report, that in the years 1853-4 (less than two years time on the entire line, as the Marion & Logansport Company was not organized until April 25th, 1853,) the receipts were \$76,338 80, and the expenditures for the

same period \$152,344 28—thus creating a debt against the company of \$76,005 48, to be paid out of the subsequent receipts of the company. This indebtedness includes the \$24,300 of real estate bonds then sold and a note of \$15,000, payable in the first mortgage bonds of the company; which note, with \$20,000 stock and \$10,000 of the bonds aforesaid (making \$45,000), were paid at the instance of your former President and resident Directors, by Webster & Marshall, to Jonas Ward & Co., as a bonus for the surrender of their contract, with a promise by said President and Directors to Webster & Marshall of indemnity against loss for so doing; thus virtually, and in all honor, making it a debt of the company. This was the claim made by Webster & Marshall, and admitted to be true by several of the old Directors, and the Board were compelled to admit it on settlement with Webster & Marshall. This \$45,000 is included in the incidental account for the years 1853-4, and swells that account to so disproportionate an amount. The \$20,000 in stock was stated by mistake in last year's report as having been paid to Ward & Co. in bonds. We are not alleging the payment of this bonus to Ward & Co. as a matter of wrong or grievance against the old Board. We are simply stating the facts as we understand them—facts material to your interests, and which you have a right to know. By rectifying the old accounts it will be seen also that the engineering expenses of 1853-4 were \$10,734 31, instead of \$15,012 23, as presented last year from the old books. This account is not extravagant, as compared with the ordinary expenditures of other companies in similar circumstances. By passing on to the expenditures of 1855-6, however (the full period of two full years), it will be seen that our engineering expenses are only \$2,017 92; and, although they ought to be smaller than for the first two years, yet they are so much smaller as to prove we are working on a much more economical scale than our predecessors in office.

"Officers' salaries in 1853-4 were \$11,478 90. In 1855-6 they were \$7,073 36. We think these salaries may be slightly reduced for the present year. It will not do, however, to carry economy (as commonly understood) too far, as it will result in what is aptly designated in the old proverb as 'penny wise and pound foolish.'

"The two last years have been unfavorable for railroad operations—the year 1855 having been so excessively wet as to greatly embarrass earth-work (especially in this clay region), and very injurious to the farming interests of the country; and 1856 so extremely dry as to parch up vegetation and ruin the crops. We have, therefore, been obliged to suspend the work on a part of the line during the past fall, in consequence of the inability of farmers to pay their subscriptions; and so great was the failure in crops that provisions cannot be furnished for the laborers and animals necessary to carry on the work. This must continue to be a source of embarrassment to the company until after the next harvest, at least. Notwithstanding these unfavorable circumstances, we have had done in 1855-6 work on the road to the amount of

\$31,625 51, and have paid the contractors within \$100 of the entire amount, excepting the per centum retained as security for the completion of the work. Also, paid all current expenses; redeemed \$36,300 of the real estate bonds; reduced the debt of \$76,005 48 due at the end of 1854 to \$14,649 63 (which includes the \$5,300 real estate bonds outstanding), and added \$25,000 to the capital of the company. And now, gentlemen, if you and your neighbors will do your duty in the premises, the road can be completed in the next two years. There is, in fact, nothing insuperable in the way of success—the greatest obstacle is apathy and want of interest with yourselves and neighbors. If the Board had been as indifferent and apathetic as yourselves, what would have become of your corporate property? It must have been sold under the hammer to pay your debts!

"We mentioned in our last year's report, among the advantages of your road as located, that it accommodated every business point in the entire Mississinewa valley, except one—Jonesboro'—and that a slight detour in the line, without adding materially to its length, would accommodate that place also. It has been recently suggested to the Board that if this company would change the location of a portion of their line, so as to accommodate Jonesboro', the people of that vicinity would contribute liberally of their means, and lend their influence to the prosecution of the enterprise—that the partly finished road bed of the Cincinnati & Chicago Railroad, now abandoned by that company, between Marion and Jonesboro', can be obtained by this company upon very easy terms, and that a line from Jonesboro' to Hartford can be obtained much cheaper of construction than the present one from Marion to Hartford."

The present cash condition of the road, as given in the Report of the Secretary, is—

1853-4.	Am'ts Received.
From sales of land.....	\$11,770 62
From stock paid.....	40,268 18
From sale of bonds.....	24,300 00
From bills, scrip, warrants, bonds, and accounts payable.....	76,005 48
	<b>\$152,344 28</b>

	\$152,344 28
	Am'ts paid out
For construction.....	\$56,190 31
For office and stationery.....	759 98
For engineering.....	10,734 31
For officers' salaries.....	11,478 90
For right of way.....	10,532 45
For incidentals.....	62,648 33
	<u>\$152,344 28</u>

1855-6.	Am't Received.
From sales of lands.....	\$106,282 80
From payment of stock.....	13,865 32
From sale of real estate bonds.....	13,700 00
From bonds resold.....	1,600 00
From notes on hand.....	3,661 80
From bonds outstanding.....	5,300 00
From real estate per centum of contractors..	3,501 80
From stock per centum returned.....	700 36
From cash.....	367 45
From bills and accounts payable.....	9,349 63
	<b>\$152,670 26</b>

	\$152,670 26
Am'ts paid out.	
By debts due from company, Dec. 31, 1854, as above stated.....	\$76,005 48
For construction.....	31,625 51
For office and stationery.....	119 69
For engineering.....	2,017 92
For officers' salaries.....	7,073 36
For right of way.....	408 56
For incidentals, say.....	5,119 74
For bonds redeemed.....	36,300 00

Whole amount of stock subscribed..... \$301,979 27



Which is made up of the following items, to-wit:

Real estate.....	\$265,428 79
Cash, labor and materials.....	61,735 26
Stock paid to Jonas Ward & Co. for surrendering contract.....	20,000 00
Stock taken by contractors.....	9,715 22
Stock taken for right of way.....	5,100 00
	\$361,979 27

#### AMOUNT RECEIVED ON STOCK.

Real estate.....	\$117,053 51
Cash, labor and materials.....	19,250 28
Stock taken by contractors.....	9,715 22
do by J. Ward & Co.....	20,000 00
do for right of way.....	5,100 00
Loss on sales of land.....	35,333 00
Balance stock on hands at cost:	
Real estate.....	113,042 28
Labor and materials.....	42,475 93
	\$361,979 27

From the Boston Messenger, May 6.

#### THE HOOSAC TUNNEL.

The Legislative Committee appointed last week to visit the Hoosac Tunnel have discharged their duty with commendable promptness, and reported Friday the result of their inspection and inquiries. They report the advances made in the excavation at the easterly entrance of the great tunnel, which, according to the statement in the petition before the Legislature, was begun in May last, to have been 274 feet, with the whole area of the tunnel; and in addition, 247 feet with the heading, making an aggregate advance of 521 feet. The heading constitutes a about a tenth part of the area of the tunnel, or of the entire mass of rock to be removed; but it is estimated to cost about a quarter part only of the excavation.

The committee state that the work is carried on, as is usual with such works, when it is deemed an object to carry them forward as expeditiously as possible, in three shifts, each set of men working eight hours in the twenty-four. They state further that there are twenty-four miners employed daily upon the heading, four drillers and four strikers working at a time, besides men employed in removing the rock, and in other services. With this force they advanced 44 feet in the heading in February, 52 in March, and 72 in April, making 168 feet linal in three months, or at the rate of 672 feet per annum. The entire advance of heading and tunnel from January last—say 11½ months, is at the rate of 544 feet per annum, which, if it be taken as the measure of what may be done throughout the average of the work, in its advance from each extremity, would bring the two parties together in a little more than 22 years. But it must not be thought that this is an enterprise of which it can be said, *c'est le premiere pas qui compte*, hut, on the contrary, the first mile will, in the ordinary course of things, cost much less than each succeeding one.

The report of the committee informs us further that on the western side of the mountain, where the work was begun in January last, the bottom part of the tunnel has been completed for a distance of 185 feet. The excavation here is through a loose limestone, which is not of a sufficient consistency to form a roof to the excavation, and, consequently, although it is easily excavated, it becomes necessary, for preventing its caving-in as the work advances, to sustain it by timbering, until it can be supported by side walls, surmounted by an arch of brick masonry. The progress thus far, without the arching, has been at the rate of about 500 feet per annum.

The short tunnel in North Adams, which is described as 440 feet in length, and which was begun in August, 1855, approaches its completion. "The heading is completed, and there only remains 135 feet of bottom to be removed." The progress of this work has not fulfilled the predictions which were hazarded, at the time of its commencement.

On the whole the work on the great tunnel and on the approaches to it appears to have been carried on by the contractor with a good degree of vigor, hut nothing has been yet accomplished to present the enterprise in any more favorable light, as to the length of time or the expenditure which will be required for its accomplishment than when the work was first begun. We are sorry to observe that a further heavy expenditure has been incurred in the construction of a costly, and we have no doubt ingenious machine, in the vain attempt of boring the tunnel by mechanical power in place of the tried implements of drill and hammer, and the power of the human muscle, with the aid of gunpowder.

**NEW ORLEANS AND BATON ROUGE RAILROAD COMPANY.**—At a meeting of the Commissioners, designated in the charter of this road, held at Baton Rouge, on the 25th inst., it was ordered that books be opened in Baton Rouge and New Orleans for the purpose of receiving subscriptions to the capital stock of the Company. Books will be opened in this city at the office of the New Orleans, Jackson and Great Northern Railroad Company's office, under the superintendence of John Calhoun, C. Fellows and W. P. Saunders, and at the office of the Merchants' Insurance Company, under the superintendence of John Pemberton, Logan McNight and W. H. Avery. The books to remain open until the 1st of July next. The parish and city of Baton Rouge have already subscribed \$200,000, and it is thought the citizens of East and West Baton Rouge will take \$100,000 more of the stock.—*New Orleans Delta.*

#### PROGRESS OF THE RAILWAY SYSTEM.

Two leading manufacturers of locomotives in England have each turned out a thousand engines. This is remarkable, in connection with the fact, that the first passenger railway, the Liverpool and Manchester Line, was thrown open to the public in 1830, or less than twenty-seven years ago. Some of the Philadelphia manufacturers turn out an engine a week at the present time. The progress of railways is, indeed, one of the remarkable features of the age. Steam has, in fact, produced a revolution in many branches of trade and manufacture. Russia has just entered upon a gigantic system of railways, and the French and English, as well as the American engineers and contractors are likely to realize handsome profits. The Emperor, it is understood pays well. Messrs. Baring, Brother & Co. have issued a prospectus, "and their name is the only English one comprised in the board of direction. The sum they ask from London capitalists out of the £12,000,000, first to be raised is £2,000,000 instead of between £3,000,000 and £4,000,000, as originally contemplated. The sum in Paris has likewise been reduced. It is to be presumed an estimate more accurate than that originally entertained has been formed of its probable reception. The statements now put forth fail to modify any of the features heretofore commented upon. The guarantee, allowing for sinking fund, is to be only 4 11-12ths per cent.; the working expenses, in the face of universal experience, are put as low as 45 per cent.; and the difficulty as to crossing the marshes with which the country abounds is simply disposed of by the statements that they "will be avoided by a proper selection of the route. The number of miles to be constructed are 2,585, at a cost of £16,511 per mile, or about £43,000,

000, and the whole must be made within ten years. It is not stated in what quarter the extra proportion first intended for London and Paris is now to be allotted. The Prussian public, who are best qualified to form an opinion of the prospects of the enterprise, both commercial and political, are understood to be disposed to limit themselves to the modest amount of £200,000, or less, although the proposed extension of the Warsaw line to their own frontier, and the intimate business connections of their bankers and others with St. Petersburg might be supposed to operate in its favor. Upon the Court of St. Petersburg and its agents the duty of making up the deficiency from the failure will therefore apparently fall, and the advices for the next few months will perhaps describe the eagerness with which the merchants of that capital, who usually never put out their money at a less interest than 10 to 12 per cent., are seeking to be allowed to contribute. With regard to the prospect of the £2,000,000 being taken in London, it must be inferred that Messrs. Baring, before they issued the prospectus for that reduced amount, were able to calculate that it could be made up by their own subscription and that of personal friends, who would feel it incumbent on them to afford assistance. The first payment is to be £6 per share, and the period for applications is from the 23th of April to the 5th of May. The contractors stipulate for 6 per cent. of all profits beyond the guaranteed dividend and sinking fund."

The amount of money invested in railways in various parts of the world can scarcely be computed; and yet we may infer that the system is only in its infancy. In this country, our greatest railway, that which is to unite the States of the Atlantic with those of the Pacific, is yet to be constructed.—*Penn. Inquirer.*

#### RUSSIA—THE IMPERIAL SCHEME.

The prospectus of this undertaking has at length been published. It properly makes its appearance in Paris. We extract its leading passages:

"The company has for its object the construction of a vast network of railways, the lines of which have been combined in such a manner as to satisfy the most immediate and important requirements of Russia. This network is divided into four lines:

1. From St. Petersburg to Warsaw, with a branch towards Königsberg.....1,249 kiloes.
2. From Moscow to Theodosia.....1,259 "
3. From Kursk or Orel to Iltbau.....1,237 "
4. From Moscow to Nijni-Novgorod.....427 "

Total.....4,162 "

These lengths are only approximative, and may be modified by the definitive tracing of the lines.

"A glance at the map shows the importance of these lines, the object of which is to secure the conveyance of those articles which are the chief necessities of life throughout the interior, the exportation of agricultural produce, and the importation of foreign products, at the same time that they will facilitate the movement of the population in those parts where it is most dense.

"In fact, the north of Russia is partly covered with forests; the soil does not produce in sufficient quantities the corn required for the support of the population. The central provinces, around Moscow, are manufacturing, and their soil likewise is incapable of furnishing sufficient food for the inhabitants. Further south, on the contrary, there is an



immense belt of lands of uncommon fertility—the region of the 'black soils.' Lastly, towards the south, come the steppes, where the greater part of the cattle are reared that are destined for the consumption of Russia.

"Now, setting aside the line from St. Petersburg to Warsaw, which has its special destination as an international line, connecting the capital with the European system of railways, all the other lines have been combined with a view to favor in the highest degree home and foreign trade; the necessities of the first are shown by the enormous differences in the prices of breadstuffs, which fetch low prices where they are grown at a time when scarcity is severely felt in the northern provinces; the actual importance of the second is to be measured by the fact of one milliard of francs changing hands for the value of goods, most of these cumbrous, weighing about 1,500,000 tons. Its future importance is limited only by the wants of Europe with respect to wood, corn, oleaginous grains and seeds, skins, wool, tallow, flax, hemp, &c.

"The line from Moscow to Nijni-Novgorod connects the industrial or manufacturing capital of the empire with its principal mart, celebrated for the extensive transactions that take place there at the annual fair; it places the Volga, a navigable artery of 3,600 kilometres, and situated entirely outside the territory, which peculiarly belongs to the conceded network of railways, in communication with Moscow by the shortest line of junction. A large traffic is secured for it.

"The southern line connects Moscow with Theodosia (Kaffa), the best natural harbor of the Black Sea, where commerce will find the facilities and accommodation which are wanting at Odessa; besides, it communicates with the latter city through the maritime part of the Dnieper and the sea. It crosses the 'black lands' for an extent of 700 kilometres; it affords them an easy outlet towards the Black Sea for their corn, oleaginous grain, tallow, flax, hemp, &c., but a still more important one towards the Baltic. It will convey northwards the cattle of the Steppes, the wines of the Crimea, the salt of the Sea of Azoff, and especially the coal of the Donetz basin, discovered and worked already in the vicinity of Kharkoff, and destined to play a considerable part in the future manufacturing career of Russia.

"The line from Kursk or Orel to Libau is destined to become one of the great routes for the exchange of rural produce, so unequally distributed between the various parts of the empire; it is especially destined to convey to the Baltic for exportation the corn and all the vegetable and animal produce collected by the southern line in the center of the 'black lands,' and by the Nijni line from the Volga and its tributaries.

"England, France, Belgium, &c., import annually for their own consumption more than 3,000,000 tons of wares, which Russia could exclusively supply them with; with respect to the greater part of which she has to encounter the rivalry of the United States, but in which she will have an incontestible preponderation when the network of her railways shall have been completed.

"One of the most decisive elements of success for the Russian network is to be found in the very rigor of the climate. The cold never prevents the regular dispatch of railway trains. The snow has interrupted the traffic upon the average only one day per annum along the line from St. Petersburg to Moscow; but, on the other hand, the navigable

routes are frozen for six months in the north, and during that period the railway will have the monopoly of all the transports, with facilities also, by means of alldges, for the branch communications.

"This advantage is the more striking because the starting point of the lines, which form altogether what may be called the exportation system of railways, debouches at the port of Libau, which is three and a half degrees further south than Saint Petersburg, and is scarcely obstructed by the ice during three weeks or a month, whereas at St. Petersburg and Riga all navigation is suspended for five or six months together. Libau, which is an unimportant harbor at present, is therefore destined to become the center of exportation for Russia's produce and of importation for foreign products. The Government has engaged to construct the works for improving the harbor of Libau, in order that they may be ready by the time the railway is fit for being worked.

"The harbor of Libau will supersede the harbors of St. Petersburg and Riga at those periods when they are closed by the ice.—Moreover, the exportation which proceeds at present *via* Memel and Königsberg, will resort there for the sake of the facilities afforded to the national commerce. This two-fold advantage adds greatly, therefore, to the importance of the line between St. Petersburg and Warsaw, which, at the same time, will become a great commercial route.

"The conceded lines will supply the inhabitants, and especially the bodies of workmen who are shifted about in the various parts of the country, with rapid and cheap means of conveyance, which have hitherto been quite a desideratum.

"The engineers charged by the company with the preliminary survey and estimate of the undertaking have calculated that the average gross receipts of the network would come to 45,500f. per kilometre; this is the result of the calculations in detail for each line, confirmed by the facts observed on the line from Moscow to St. Petersburg, where, notwithstanding the insufficiency of the *material* and of the accommodation for the traffic of merchandise, the gross receipts per kilometre rose in 1856 to more than 46,000f. In the estimate adopted travelers have been set down at only one-fourth, although the lines traverse the most populous parts of the empire. In proportion to the facilities resulting from the low price of fuel and manual labor, especially on account of the considerable receipts per kilometre which will be derived, taking the trains on the average, from the goods traffic for great distances, drawn by powerful locomotives, with very favorable gradients, we may estimate the working expense at the rate of forty-five per cent. as the maximum.

"In consequence, the total receipts will be 189,345,800f.; the expenses, at forty-five per cent., 85,205,610f.; yielding a net return of 104,140,190f.

"With the exception of the line from St. Petersburg to Warsaw, all the works are of very easy execution. Upon this line the Government abandons temporarily the 72,000,000f. it has already expended, and which will be defrayed only by its sharing in the special profits of this line, after payment of the interest.

"The average cost of the lines which go to form the network, supposing only one line of rail to be laid down, but including the works already finished for 72,000,000f., is estimated

by the engineers at 273,650f. per kilometre. This average is obtained from the figures given in the concessionary charter, and which have been calculated with the assent of the Government, so as to enable the company to take possession completely, and provide for the exigencies of a considerable traffic. Should there be a surplus, it would be employed in diminishing the company's capital, or would form a reserve for the further development of the lines.

"The price of land in Russia will be very moderate; a great part will be made over gratuitously from the domains of the crown. The wood, an essential element in all Russian constructions, is extremely cheap; the iron and machinery are to be imported free of duty, and conveyed at the cost of back freights, by the railway from St. Petersburg to Moscow. Except on the line from St. Petersburg to Warsaw there are only a few bridges, not many embankments or artificial works; and over great tracts of land there are uncommon facilities for construction. Throughout the 4,000 kilometres of network there will not be a single tunnel, even of inconsiderable length; the difficulties which would be incurred in crossing marshes will be avoided in the adoption of the routes.

"The railways that may best be compared with that of Russia have been constructed at a far less average cost than the present estimate for these railways when completed and worked."

An article in the *Northern Bee*, in an effort to prove the future prosperity of the railway from Moscow to Theodosia, affords us some interesting data. The chief article of export from the Tauric peninsula is salt; at present from 5,500,000 pouds to 11,000,000 pouds of this article are exported to the western provinces; the salt lakes, however, are capable of producing 33,000,000 pouds. The transport of the salt is performed by about 120,000 vehicles, which pass through Perekop between May and September. On the other hand, no less than 300,000 of such vehicles are employed every year in bringing the grain from the interior to the ports for exportation. As with the salt, so it is with the fruit in the Crimea—only one-third of it is carried to market. The cultivation of the vine, the breeding of cattle, and agriculture in general are all being starved, from the fact that the expensiveness of all supplies from the interior makes it impossible to keep a sufficient number of hands to do the work.

**IMPORTANT DECISION.**—An important decision was rendered at the Toronto Assizes on the 27th instant, in the matter of *Anthony v. the Grand Trunk Railway*.

A bale of goods was delivered to the defendants in Montreal to be forwarded to Toronto; the said Defendants giving a receipt for it in which they limited their liability to the sum of \$200. The goods were lost, and the defendants tendered \$200 as the extent of the claim against them for loss or damage, the value of the bale being \$560.

The question for decision was whether the defendants as common carriers had the power to bind those employing them by such a stipulation in their receipts, and whether having failed to perform the covenant of delivery, they were not responsible for the value of the article entrusted to them aside from all limitations.

Verdict for Plaintiff, full value of the goods and interest.—*Montreal Commercial Advertiser* April 30.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds.	Name of Company.	Quot of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon & Hmp'sr	.....	173	5,000,000.00				
498,800	0			1862-3	2d "	.....	Androscoquin & Kennebec	.....	54.75	1,400,000.00		209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	.....	80.5	1,000,000.00	199,000.00	276,123.74	173,780.74	4 pr. ct. 6m
52,646	6			now	"	.....	B'ng'r, Old T. & Milford...	.....	12.5	135,000.00	52,046.26	39,104.40	2,671.61	15,000 n' 33
500,000	7		N. Y.	1-65	1st mortgage.	.....	Boston & Worcester...	.....	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180000 4.5m
500,000	7			1857-9-92	Income.	.....	Buffalo & State Line...	.....	.....	1,200,000.00				3 pr. ct. 6m.
200,000	7			1864	Domestic.	.....	" " "	.....	.....					
577,187	6			1872	4th mortgage.	.....	Central Ohio...	.....	30					
192,206	7			1874	1st mortgage.	.....	Champl'n & St. Lawrence	.....	43	1,872,800.00	1,601,087.00	163,200.00	77,700.00	10 per ct.
380,000	7				2d "	.....	" " "	.....	.....					
1,140,000	7			1864-7	Domestic.	.....	Ch'l'te & South Carolina...	.....	110	1,750,000.00	280,000.00	291,219.85	47 per ct.	\$72,200
1,300,000	6-7-8		N. Y.	1868-9	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy...	.....	133	3,796,900.00	3,114,000.00	1,095,165.00	571,725.23	15 pr. ct. 6m
374,000	8			1868-76	2d "	.....	" " "	.....	.....					
1,500,000					Convertible.	.....	" " "	.....	.....					
532,000					1st mortgage.	.....	Chicago, Fulton & Iowa...	.....	5					
104,000					2d "	.....	Chi. Will'ng'n & Zanesville	.....	13	1,761,149.16	2,241,500.00	221,491.96		
305,500					3d "	.....	" " "	.....	25					
540,000	6				Income.	.....	" " "	.....	.....					
43,000				1873	Convertible.	.....	Cleveland Col. & Cin.	.....	104 1/2	4,741,220.00		1 3,754	700,804	6 per cent.
400,000	7			1861	1st mortgage.	.....	Cleveland & Mahoning...	.....	85	1,500,000.00				
0,000 0	7			1873	2d "	.....	" " "	.....	.....					
500,000	6			1857-8-9	1st mortgage.	.....	Cumberland Valley...	.....	52	1,218,300.00	1,600,000.00	160,511.66	81,101.56	\$33,250.24
250,000	7				1st "	.....	Dayton & Cin. short line.	.....	93 5/10	1,000,000.00		663,378.79	288,077.84	\$234,133
740,000	7			1860	1st "	.....	Eastern Railroad...	.....	130	3,243,400.00		30,597.30	19,692.30	
88,000	10			1861	2d "	.....	East Ten. & Virginia...	.....	109	675,450.00				
400,000	7			1864	1st mortgage.	.....	Essex Railroad...	.....	20	700,000.00		249,970.42	136,061.50	\$133,281.45
200,000	10				2d "	.....	Evansville & Crawf'd'vle	.....	222 1/2	557.00		681,102.52	213,837.81	3 per cent.
					1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	33	50,000.00				
100,000	6				1st mortgage.	.....	Fox River Valley...	.....	33	30,000.00				
100,000	6				1st "	.....	Fair Haven Branch...	.....	93	30,000.00				
300,000	6 1-9			1858	1st "	.....	Georgia R.R. & Banking Co.	.....	281 1/2	4,191,550.00		1,068,212.53	337,659.42	\$66,240.00
4,000,000	7			1869-70	1st "	.....	G't West'n R.R. of Can.	.....	74	2,000,000.00		2,068,236.00	339,196.50	8 pr. ct.
2,000,000	7			1860	2d "	.....	Housatonic Railroad...	.....	24 1/2	4,600,000.00		1,924,382.44	718,037.40	
1,812,000	7			1875	3d mortgage.	.....	" " "	.....	144	4,000,000.00				
12,885,000	7			1876	1st "	.....	Illinois Central R.R.	.....	139	18,433,376.00		1,476,035.27	1031,489.08	7 pr. ct.
4,115,000	6 1/2			1860	1st "	.....	" " "	.....	704	3,558,376.00				
3,000,000	7			1869	1st mortgage.	.....	Indiana Central...	.....	72 1/2			354,871.00		3 pr. ct.
600,000	7			1862	2d "	.....	" " "	.....	.....					
700,000	7	Nov. 1.			1st mortgage.	.....	Iron R.R. ....	.....	13	123,700.00				
50,000	7	Jan. & July 1			2d "	.....	Kentucky Cen. 2d Div.	.....	.....	719,500.00				
700,000	7				1st mortgage.	.....	Knoxville & Kentucky...	.....	32	166,000.00		24,233.50	14,233.50	
					1st "	.....	Laurens (S. C.) R.R.	.....	184					
218,000	7			1866	2d "	.....	Louisville & Nashville...	.....	12 3/4	300,000.00		50,244.71	14,149.13	\$2,000
1,000,000	7			1875	3d "	.....	Lowell & Lawrence...	.....	.....	2,697,090.00		587,236.57	162,277.50	10 pr. ct
1,000,000	6			1868	1st "	.....	Mad River & Lake Erie...	.....	.....	2,697,090.00				
2,000,000	7			1874	2d "	.....	" " "	.....	26	1,000,000.00				\$24,000
2,500,000	7			1867	1st "	.....	Manchester & Lawrence...	.....	19					
2,000,000	7 and 8			1867	1st mortgage.	.....	Marietta & Cincinnati...	.....	.....					
60,000	8			1881	1st "	.....	Mexican Gulf R.R.	.....	27					
420,000	8			1-68	2d "	.....	Milwaukee & Horicon...	.....	30					
329,000	8			1884	1st "	.....	Mineral Point R.R.	.....	32					
320,000	6			1869	1st mortgage.	.....	" " "	.....	32					
6,000,000	6			1869	1st mortgage.	.....	Mobile & Ohio...	.....	497	10,000,000.00		254,498.96	162,802.24	
				1869	2d "	.....	Nashua & Lowell R.R.	.....	15	600,000.00		19,173.42	55,501.74	7 pr. ct.
500,000	7	May & Nov.	N. York	1864	1st mortgage.	.....	New Haven & North'm'n	.....	53	922,500.00		7,707,348	3,609,481	2 pr. ct. 6m
2,366,000	6	June & Dec.	N. York	1873	2d "	.....	New York Central...	.....	86 1/2	23,067,400	14,763,807			3 pr. ct. 6m
8,812,600	7			1863	1st "	.....	" " "	.....	.....					
3,000,000	7			1863	2d "	.....	N. Y. & Harlem R.R.	.....	15 1/2	5,717,100.00		1,040,593.26	64,678.71	\$37,692.30
936,000	6			1873	1st "	.....	" " "	.....	66	1,580,000.00		245,713.00	51,544.40	
411,700	6			1863	2d "	.....	N. Y., Prov. & Boston...	.....	.....	1,700,000.00		120,571.50		\$25,000
500,000	6			1863	1st "	.....	N. Lon., Will'm'tu & Pal.	.....	.....					
300,000	6			1863	2d "	.....	" " "	.....	.....					
				1861	1st mortgage.	.....	Pontchartrain R.R.	.....	5	500,000.00		116,795.60	366,118.80	7 pr. ct.
1,500,000	6			1873	2d "	.....	N. O., Opel'o's & Gr. West.	.....	62 1/2	6,000,000.00		1,007,666.48		
1,000,000	6			1873	3d "	.....	N. Y. & New Haven...	.....	103 1/2	3,000,000.00				
2,000,000	7			1859	1st mortgage.	.....	North Western Va. R.R.	.....	.....					
1,500,000	5			1877	1st mortgage.	.....	" " "	.....	118	2,000,000.00		600,000.00		7 pr. ct.
3,000,000	7			1860	2d "	.....	Northern (N. Y.) R.R.	.....	19 1/2			23,176.74	88,458.56	2 1/2 pr. ct.
419,200	6			1860	1st mortgage.	.....	North Missouri R.R.	.....	60	2,111,500.00		304,236.33		
221,800					2d "	.....	Norwich & Worcester R.R.	.....	.....					
					1st mortgage.	.....	" " "	.....	.....					
					2d "	.....	Ogd'sh's, Clay'tn & Rome	.....	94			289,690.10	137,875.43	5 pr. ct.
400,000	8			1866	1st mortgage.	.....	Ontario, Simcoe & Huron	.....	88 3/4	2,957,500.00		276,539.02		
1,200,000	7			1875	2d mortgage.	.....	Orange & Alexandria R.R.	.....	.....					
300,000	8			1873	1st "	.....	" " "	.....	47	1,500,000.00				
300,000	7			1861	1st mortgage.	.....	Peoria & Bureau Val. R.R.	.....	28 1/2	1,000,000.00				6 pr. ct.
800,000	6			1864 to 1874	1st "	.....	Philadelphia & Trenton...	.....	75	2,000,000.00				
1,260,000	6			20 years.	1st mortgage.	.....	Portsmouth & Concord...	.....	62 1/2	950,000.00		68,525.42		
					2d "	.....	Potsdam & Watertown...	.....	86	6,000,000.00				
					1st mortgage.	.....	Rutland & Washington...	.....	168 3/4	4,000,000.00				
					2d "	.....	St. Louis & Iron Monn. R.R.	.....	116	500,000.00		75,246.06	17,378.08	
500,000	6				1st "	.....	Salem & St. Louis R.R.	.....	95					
250,000	6				2d "	.....	Snd'sky, Mansf'd & Newk	.....	.....					
					1st mortgage.	.....	Sullivan Railroad...	.....	145			39,586.44		11m. 12 pr. ct
317,000				1861	1st mortgage.	.....	Tennessee & Alabama...	.....	73	1,294,450.00				
300,000				1840	2d "	.....	Terre Haute & Richmond	.....	242	1,000,000.00				
198,000				1875	3d "	.....	Toledo, Wabash & Western	.....	.....					
262,500					1st, 2d, 3d "	.....	Troy & Boston...	.....	.....					
2,500,000					1st mortgage.	.....	Vicksburg & Jackson...	.....	215	3,000,000.00		322,048.60		2 pr. ct.
595,000	7				2d "	.....	Virginia & Tennessee...	.....	31	163,000.00				
200,000	7				1st mortgage.	.....	Westchester (Pa.) R.R.	.....	171					
					2d "	.....	Wilmington & Manchester	.....	32					
					1st mortgage.	.....	Winchester & Potomac...	.....	45 69					
					2d "	.....	Worcester & Nashua...	.....	.....					



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

April 24th, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858.	—	88
Cin. Ham & Dayton, 2d mort., conv. ....	—	80
Detroit & Milwaukee, 1st mort., conv. till 1865.	68	69
Erie, 3d Mortgage, 1883.	73	74
" Sinking Fund.	72	74
" conv. 1862.	73	75
Grand Trunk (Canada) Debenture.	88	90
Great Western " conv.	122	127
" " non-conv.	108	108
Illinois Central, 1st Mort., 7's.	90 1/2	91 1/2
" " with option 70 per cent.	—	—
shares till Jan. 1858.	106	108
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent.	86	88
Little Miami 1st Mort. not conv. 6's.	—	—
Marquette & Cincinnati, 1st Mort.	—	—
Michigan Central, conv., 8's, 1860.	90	91
do do do 1869.	90	91
N. York Central. No Mort. Not conv., 6's	92	94
" conv., 7's.	92	94
Ohio and Mississippi, 1st Mort.	69	71
Ohio and Pennsylvania, Income 1872.	69	71
Panama. No mort., conv. 1866.	88	89
Pennsylvania, 1st Mort., conv.	88	89
" Sterling, 2d Mort.	91	93
Stenberville and Ind., 2d Mort.	—	—

The quotations given are sterling quotations. The American value is to be obtained by adding an exchange generally about 10 per cent.

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE

AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending May 20, 1857.

## BONDS.

\$3,000 Little Miami R. R. Co. 6 per cent	80
1st Mortgage Bonds.	80
2,000 Indianapolis & Cincinnati R. R. 7 per cent. 2d Mortgage Bonds.	80
1,000 Cincinnati, Ham. & Dayton R. R. Co. 7 per cent. 1st Mort. Bonds.	90 and int.
2,000 Covington & Lex. R. R. Co. 6 per cent. 1st Mortgage Bonds.	70
4,000 Indiana Central R. R. Co. 10 per cent. Income Bonds, due in '58.	95
1,000 Columbus and Xenia R. R. Co. 7 per cent. Div. Bonds, due in 1860.	90
5,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds.	55
8,000 Cin., Wil. & Zanesville R. R. Co. 7 per cent. 2d mort. Bonds.	25
1,500 Cincinnati & Chicago R. R. Co. 10 per cent. Real Estate Bond, Butler & Meredith, Trustees.	25
3,000 Cincinnati & Whitewater Canal Bonds, including interest.	10
1,000 Ohio Central R. R. Co. 7 per cent. 4th Mortgage Bonds.	30
372 50 Little Miami R. R. Co. Dividend Scrip.	82

## STOCKS.

200 Shares Ohio & Miss.	11 1/2
100 " do do 20ds.	12
22 " do do	12 1/2
100 " Indianapolis and Cin. 15ds.	63
140 " Little Miami.	95
20 " do do	94
20 " Cin., Ham. & Dayton.	98
113 " Ohio Central.	15
65 " Dayton & Western.	20
66 " Cin. & Chicago.	2 1/2 and int.
20 " Junction (Ind.).	8
13 " Eaton & Hamilton.	16 1/2
20 " Wabash Navigation Co.	21
12 " Farmers' Bank Ky.	120
110 " Southern Pacific.	\$3 25 for \$5 paid.

## MONETARY AND COMMERCIAL.

The past week has exhibited no new phase in the money markets. The demand continues in advance of the supply of capital, and borrowers are compelled to limit themselves to the ability of the discount houses to supply them rather than to their actual necessities. The primary, moving cause of all this is the locking up of the surplus capital by land entries in Kansas, Nebraska, Minnesota and Iowa. In many instances the prices for lands in these newer States range higher than in Indiana, Illinois and Ohio. This is a feverish state of things, and cannot last, as it is evident that lands 500 miles away from markets cannot be worth as much as those which command a home market. The tide which has been flowing westward is beginning to receive a check, and the reaction must soon follow.

Eastern Exchange, which is a pretty sure index of the markets for money, has been sustained at 1/4 to 1 per cent., with a market a little less active than at last dates.

At New York we notice an improvement. There is an increase in specie, a decrease in circulation, an increase in undrawn deposits, and a decrease in loans. Foreign exchange is quoted at 109 1/2 @ 109 3/4 for London. The stocks attracting most attention are the Michigan Southern, Cleveland & Toledo and Illinois Central.

We subjoin our usual quotations from Hewson & Holmes:

There is very little variation in the general aspect of the stock market, as compared with last week; transactions have been more limited and prices have hardly been sustained.

Little Miami shares have not been in as active request as usual, with sales at 94 to 95. Hamilton & Dayton is quiet, with sales at 68. Indianapolis & Cincinnati shares have sold at 63. The earnings of this road for April were nearly 12 per cent. in excess of the earnings of the same month last year; this, in view of the general falling off in the earnings of nearly all Western roads for April, is doing remarkably well, and ought to give the friends of this company increased confidence in its securities. Ohio & Mississippi shares have been sold at last week's currency. We note sales of Ohio Central shares at 15, Dayton & Western at 20, and Farmers' Bank of Kentucky stock at 120.

In Bonds the movement has been very steady. We report the usual amount of sales without variation from our last quotations.

Money affairs are slightly easier, but borrowers still have difficulty in placing any but first class names.

The weather in the past week has been dismal, affecting prejudicially all kinds of business. Vegetation is a month later than usual. We have now, however, the indications of seasonable weather.

Exchange on New York 3/4 to 1 per cent.

SALES AT THE NEW YORK STOCK BOARD—May 18.

\$15,000 Indiana State 5's.	82 1/2
2,000 Virginia 6's.	91 1/2
4,000 North Carolina State 6's.	91
8,000 Missouri State 6's.	82 1/2
5,000 Louisiana 6's.	87
4,000 California State 7's, 1870.	56 1/2
500 California 7's, 1875.	57
4,000 Tenn. State 6's, '90.	66 1/2
3,000 N. Y. Central 6's.	86 1/2
1,000 Erie Railroad Bonds, 1875.	88
2,000 Goshen Branch Bonds.	77
25,000 Illinois Central R. R. Bonds.	100
100 shares Pacific Mail St. Co.	63
10 " Cleve., Col. & Cin.	10 1/2
30 " New York Central.	86 1/2
50 " Erie.	41
400 " Hudson River.	24 1/2
5 " Third av. R. R.	89
200 " Reading.	79 1/2
250 " Illinois Central.	139
829 " Mich. S. & N. Ind.	70
10 " Panama.	94
25 " Galena & Chicago.	98 1/2
2115 " Cleveland & Toledo.	69 1/2
50 " LaCrosse & Milwaukee.	77
50 " Chicago & Rock Island.	96 1/2

## Earnings.

CLEVELAND & TOLEDO R. R.—The receipts of the Cleveland & Toledo Railroad for

April, 1857, were.....	\$133,197
April, 1856.....	120,229
Increase.....	\$2,968

CLEVELAND & PITTSBURG R. R.—The earnings of the Cleveland & Pittsburg Road for April, were....

April, 1856.....	\$85,341
April, 1857.....	51,000
Increase in 1857.....	\$34,341

MICHIGAN CENTRAL R. R.—The following is a comparative statement of the earnings of the Michigan Central Railroad for the month ending April 30, 1857, and the corresponding month last year:

	1857.	1856.
Passengers.....	\$151,269 23	\$147,430 99
Freight.....	139,767 20	125,837 32
Miscellaneous.....	7,520 80	7,538 70
Total.....	\$298,399 75	\$280,807 91
Increase.....		17,592 74

PITTSBURG, FT. WAYNE & CHICAGO R. R.—The earnings of this road for the month of April were:

Freight.....	\$55,773 12
Passengers.....	98,681 02
Mail.....	4,493 75

The earnings of the three roads for April, 1856, were.....	\$166,106 69
1856, were.....	118,645 68
Increase (34 per cent.).....	\$40,462 21

BALTIMORE & OHIO R. R.—The following is a comparative statement of the earnings of the Baltimore & Ohio Railroad for the month of April:

	Main Stem.	Wash. Branch.	Total.
April, 1856.....	\$312,240 35	\$39,570 93	\$551,811 28
April, 1857.....	424,167 77	36,780 62	464,948 39
Decrease.....	\$84,072 58	\$2,790 31	\$86,862 89

LAKE ERIE, WABASH & WESTERN R. R.—The receipts of the Lake Erie, Wabash & Western Railroad for April were as follows:

Passengers.....	\$17,872 94
Freight.....	29,170 93
Mail.....	3,123 93
Express.....	1,300 50
Total.....	\$51,463 80

THE GEORGIA R. R.—From the Annual Report of the President of this road, presented at the meeting of the stockholders, we make the following abstract, which we find in the Augusta Constitutionalist of the 13th:

The gross proceeds of the railroad for the year ending 31st March last.....\$1,109,681 75

Charged with ordinary current expenses..... 531,244 82

Net profit, deducting ordinary expenses.....\$578,436 93

New work and other expenditures..... 318,912 85

Net from road, deducting all charges.....\$359,464 08

The profits of the Bank, and the income from the investments managed by that department.....\$204,881 73

Deduct expenses, &c..... 64,970 87

Net revenue from this source.....\$139,9 0 6

Add profits from road..... 389,464 08

Profits from all sources.....\$529,374 94

Deduct amount paid two dividends..... 332,480 00

Applicable to reserved fund.....\$196,894 94

Reserved fund, March 31, 1856..... 317,411 63

Reserved fund, March 31, 1857.....\$514,306 57

**J. T. CRAPSEY,**  
**ATTORNEY AT LAW,**  
OFFICE:  
**N. W. Cor. Walnut & Sixth streets,**  
ny21 CINCINNATI

G. W. MORRILL. G. B. BOWERS.  
**MORRILL & BOWERS,**

(Successors to and members of the late firm of C. W. SON & CO.)

**CLEVELAND, OHIO,**

Are prepared to execute all orders for

**Railroad Cars of Every Description.**

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Washn., we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases. ap16



[From Herapath's Railway Journal.]

**RAILWAY SECURITY.**

Although railway companies appear to be open to such frauds as those of Redpath, he it observed that their property cannot entirely be swept away. Redpath, the prince of swindlers, caused the Great Northern Railway Company, in the course of years of most successful operating, during which one would think others concerned in the company must have been stone blind, a loss of about £180,000, which, though a large sum, is really little by the side of the capital of the company, which amounts to about twelve millions sterling. Railway property is of such a character that it cannot be carted away wholesale. The capital, usually reckoned by millions, is sunk in works done and materials procured and fixed, or in such use that they cannot be removed. No swindler can run away with the Great Northern Railway—works, lines, stations, and locomotive and carriage stock. He may (if Directors, Auditors, Shareholders and other officers be inattentive) forge shares to the extent of £200,000 or £300,000, but even that, after what has passed, is not to be apprehended. In banking, and many other joint-stock companies, on the other hand, the Shareholders are almost entirely in the hands of their Directors and officers. We cannot have in railways a Royal British Bank; for, in the first place, all the property cannot be made away with, and, in the second place, the Shareholders of a railway company cannot be rendered liable for more than the amount of their respective shares.

We do not mean by these observations to disparage joint-stock banking property, which, in the city of London especially, is usually profitable and well managed; but we merely desire to point out a difference in security existing between railway and most other joint stock property.

It might further be remarked that although railway dividends are now small, they must be progressive, since the capital accounts of the companies are practically nearly closed, and the traffic is ever advancing. Railways in this country used to pay about 10 per cent. They now pay little more than 3½ per cent.; not because the traffic has fallen off, but because the companies have made three or four times their length of branch and extension lines, which, yielding little or no return on their outlay (principally by reason of the latter being so heavy), have weighed down the dividends of the old railways. But, the evil of branch and extension lines having now ceased, and the traffic continuing, as it has for twenty years past, to largely increase, future years must bring about better dividends. Indeed, for the last two or three years, ever since the evil referred to abated, the railway dividends have progressed. In 1852 the dividends averaged not quite 2½ per cent.; in 1856 full 3½.

Railway property may be regarded as secure as the land on which it stands, but as much more progressive in value.

[From the London Railway Times.]

**GREAT RUSSIAN R. R.**

Something definite in respect to this mythical undertaking has at length been revealed. There is not that precise exactness in detail in the prospectus with which we in England are accustomed; but, as the groundwork of large schemes in this country are never adhered to, there may be little to complain of in this department. So far as can yet be ascertained the capital may be 45,000,000L,

only one-half more than that so admirably managed by the Directors of the London & Northwestern. In the heart of England, in its busiest and wealthiest district, 5 per cent. is maintained solely by encroachments on capital; but in Russia, such is to be the accuracy and purity of management, 5 per cent. is guaranteed—under the proviso that a sinking fund is to be established out of that amount. The first issue comprises 600,000 shares of 20L each, and the first payment comprises the moderate demand of 6L per share. Nearly one-third of the entire amount is called in before subscribers (if there be any such beyond the speculating contractors and money-changers) really know where the lines are situated. A Russian Privy Councillor sits at the head of the Board, and on his right and left hands are the renowned Baron Steglitz, of Vienna, and the still more applauded Mr. Thomas Baring, of London. Confining our advice to our own countryman, we venture upon the impudence of recommending Mr. Baring to get us well out of the Grand Trunk before he inveigles us into this Great Russian.

The chief obligations set forth in the prospectus are these—

"The undertaking is to be conducted by a council of twenty members, of whom nine are to form a committee in Paris. The calls and interest are to be payable at St. Petersburg, Paris, London, Amsterdam and Berlin. Ten years are to be allowed for the completion of the whole of the lines, reckoning from the date of the concession. The concession is to last for eighty-five years, dating from the completion of the lines; but the Russian Government reserves to itself the right of purchasing the whole at the expiration of thirty years from the date of that document."

We do not wish to be precipitate; but, when Mr. Baring calls for subscriptions in England, we trust that the able financier will state the amount his house is disposed to embark in the undertaking, accompanied by a pledge that there is to be no selling out without public notice.

[From the Baltimore American May 11.]

**BALTIMORE & OHIO R. R.**

THE MAYOR AND CITY COUNCIL OF BALTIMORE vs. THE BALTIMORE & OHIO R. R.—In matter of the petition of the defendant for "leave to withdraw its answer heretofore filed"—March Term, 1856.—The defendant in this cause, on the 21st day of January, 1857, filed this answer, which it now desires to withdraw, to the bill of the complainant, on which an injunction had been ordered. An order to take testimony in reference to the allegations in the bill was passed on the 23d day of the same month. The testimony was returned, with the commission under which it was taken, on the 18th day of March, 1857, and since then the proceedings have been and now are in a condition for a motion to dissolve the injunction. The case being thus situated, the defendant on the 24th day of the same month files a petition, in which it prays "leave to withdraw the answer heretofore filed, in pursuance of the resolutions passed by the President and Directors of the said company, herewith filed as a part hereof." The petition itself sets forth no reasons for the application; but, referring as it does to the resolutions of the company, they may be considered as embodied in it, and as sufficiently stating the grounds upon which this application rests. The petition then, treating the resolutions as a part of it, states:

1. That the paper purporting to be the answer of this company to the bill of complaint of the Mayor and City Council of Baltimore, and filed in this case, not having received the assent of the Board, cannot in any just sense be considered the answer of the corporation.

2. That the said paper, if allowed to stand as the answer of the company, may be used and relied upon to its prejudice in other suits or controversies in relation to the said dividend.

This paper, as the petition avers, is "under the corporate seal of the company, and is verified by the affidavit of its President;" and yet the company insists that it is not its answer, because it was never submitted to its Board of Directors. It is also signed by two solicitors of this Court, of high professional standing.

It cannot be expected that this Court will be influenced in its action upon the question of withdrawing this answer by the first reason above stated. It alleges

that a paper purporting to be the answer of the company, prepared and signed by its solicitors, authenticated by its seal, and verified by the affidavit of its President, cannot in any legal sense be accorded as its answer, for the reason that it was never submitted to the Board of Directors, and never received their assent. The fact here alleged as invalidating this answer has never been put in issue under this petition. The parties who should be heard in reference to it, and who are interested in justifying what has been done, have never been before the Court, and the Court finds nothing in the proceedings upon the subject, except the bare allegation in the petition. The answer on its face is in due form, and I must view it in this condition of the case as the genuine answer of the company.

The application to withdraw the answer must be regarded then as made simply because it may be used and relied upon to the prejudice of the company in other suits in relation to the dividend.

Can the Court, consistently with the rules that regulate its practice in such cases, grant leave to the defendant, in the existing condition of these proceedings and for the reasons alleged, to withdraw its answer, or, more properly speaking, to take it off the file? It is said, in behalf of the petitioner, that this privilege is not opposed by the complainant. This may be so, but it has not been filed in the cause any written consent to the granting of this privilege by the Court, and, in the absence of this, the Court cannot grant it, unless the defendant is entitled to it, as a matter of right under the circumstances, or unless this be one of those cases in which the Court, without considering the question of right, will permit the defendant to take it off the file, or will order it to be taken off.

It is to be observed that this is not an application to take the pleading off the file to be immediately re-filed after some corrections are made, in matter of form, or otherwise, such as the Court is in the practice of permitting; but it is an application to remove it altogether from the proceedings. The Court undoubtedly possesses this power, and often exercises it, in some cases permissively, and in others by command. It will frequently order an answer to be taken off the file upon the motion of the complainant, when he points out such defects in its frame, form, title, language or matter as, according to the practice of the Court, entitle him to the order.—(L. Barbour, Chan. Prac., 168, 169; Daniels' Chan. Prac., 918, 919; 11. Bland's Chan. Prac., 20.) In some cases it will permit the defendant to take it off the file; but I am satisfied, from a careful examination of the authorities, that this is only allowed in cases in which the Court, after having had its attention called to the answer by the objections of the complainant, or, after having weighed and considered upon submission in the progress of the cause, has deemed it a nullity, or so defective as not to answer the purposes as a pleading, for which it is designed: *idem. idem.*

Guided by these rules, I cannot permit the defendant to withdraw this answer, which, as I have already remarked, I must regard as the answer of the company, not excepted to by the complainant as defective in any particular, and having no inherent defect which the Court upon inspection can discover that renders it a nullity or totally insufficient as a pleading, and, in fact, having no other fault brought to the notice of the Court except that which the defendant imposes to it, viz: that it is of such a character that it may be used to its prejudice, &c., a reason never heretofore recognized as sufficient to induce a Court to allow an answer filed to be taken off the file. I must therefore refuse the leave prayed.

W. G. KNESS.

**LAND DAMAGES—IMPORTANT DECISION.**—The following important decision was rendered in the Supreme Court of Indiana, May Term, 1856:

**Indiana Central Railroad Company v. Hunter.**—Appeal from the Marion Circuit Court.

Suit against a railroad company for entering upon and constructing their road through the plaintiff's land. The complaint particularly alleges the nature and locality of the injury to be the running diagonally through the land, occupying about seven acres of it, and excavating and heaping up dirt upon it. On the trial, the plaintiffs were permitted to prove the cost of fencing the road through their land, and the amount of injury done to a crop of wheat growing thereon, by the construction of the road. Held, that this evidence should have been excluded, because the damages proved did not result from the injuries specified in the complaint, nor from anything necessarily incident to them.

In a suit against a railroad company for injury to land the defendant will not be permitted to prove the value of the land at the time of trial. The value of the land, if referred to at all, to determine the benefits conferred upon the owner by the construction of the work, should be estimated at the time of such construction.

In the present case the defendant asked the following instruction, which the court refused: "In ascertaining the extent of the injury to the plaintiffs, an estimate of the value of the property taken, at the time of the taking, is a necessary step; but, if the benefits resulting to the plaintiffs by the construction of the railroad equal in pecuniary value the value of the property taken by the defendant, it is a just and legal compensation for the property so taken." Held, that the instruction should have been given.

**ROCK ISLAND AND ALTON R. R.**—This road has been located through Arenzville, Havana and Bath.



**GENERAL**  
**RAILWAY SUPPLY AGENCY.**  
**SNOOK & HILL'S PATENT**  
**LOCOMOTIVE LAMPS,**  
 83 Liberty Street, Cor. of Broadway,  
**NEW YORK.**

**JOHN W. KELLY,**  
**MANUFACTURERS' AGENT,**

For the sale of all Materials used in the Equipment and repairs of  
**RAILROAD ENGINES & CARS,**  
 ALSO AGENT FOR THE SALE OF  
**HUGHE'S ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

**BUSH & LOBDELL**  
 Wilmington - - - - - Delaware.

MANUFACTURERS OF  
**CHILLED WHEELS**  
 AND

**TIRES,**  
 For R. R. Cars & Locomotive Engines,

ARE PREPARED TO  
 Execute Promptly Orders to any Extent  
 FOR THEIR

**CELEBRATED WHEELS,**  
 EITHER SINGLE OR DOUBLE PLATE.  
 WITH OR WITHOUT AXLES.

**WHEELS FITTED**  
**To Hammered or Rolled Axles.**

In the best manner, at the shortest notice, and on the  
**Most Reasonable Terms.**

ap23

**TO PRINTERS.**

**Large Cylinder Hoe Press**  
**FOR SALE.**

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once.  
 Address  
 WRIGHTSON & CO.,  
 167 Walnut street, Cin'ti, Ohio.

N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.  
 ap8-1m W. & CO.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
 W. G. HYNDMAN,  
 ap23 41 East Second street, Cincinnati, O.

**Railroad Iron.**

2000 TONS RAILS, Erie pattern, weighing about 56 lbs. per yard, in port and to arrive; for sale in lots to suit purchasers, by

M. K. JESUP & CO.,  
 44 Exchange Place, New York.

**FOR SALE.**

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

WRIGHTSON & CO.,  
 ap8-1m 167 Walnut street, Cin'ti, Ohio.

**SILVER, GOLD, LEAD,**  
**And Other Minerals.**  
 ON THE PROPERTY OF THE  
**Sonora Exploring and Mining Co.,**

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 240,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Agent for the Company,  
 Old Fellows' Building,  
 mar26 Cor. Third and Walnut streets, Cin'ti, O.

**Norris' Locomotive Works.**

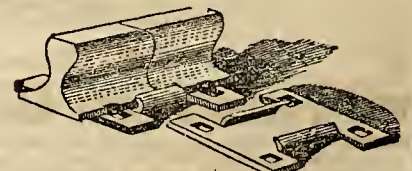


**PHILADELPHIA.**

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
 Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
 J. 27. RICHARD NORRIS & SON.

**RAILROAD SPIKES.**



**WROUGHT IRON**

**Chairs and Fastenings.**

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT AND CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch.  
 J. HOPKINSON SMITH  
 No. 25, South Charles

Please direct the name in full.  
 Baltimore August 31-+



## Racine and Mississippi Railroad.

THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Sup't.  
Racine, May 15, 1857. my21

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



### Manufacturers of all kinds of Railroad MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

iso, engraved in a style corresponding in excellence with that of Bank Notes—

### RAILROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Ctn.

## PAGE'S

### PATENT PORTABLE CIRCULAR S.W. MILLS.

THE subscribers are manufacturing, under patent, the Threshing Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEW & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
aj 12 Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House,  
Cincinnati, Jan. 31, 1855. [Jan. 17] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

### Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron

R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

LOCOMOTIVE HEAD-LIGHT, Station, Bridge, and Switch Signal Lights. Conductor's Arm, Breast, and Hand Lanterns,

Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engino, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets

Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do.,

Dudgeon's, Burroughs', and Ball's Patent Jack Screws

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED. oc23-ly

## E. MENDENHALL,

### MAP, BOOK & PRINT SELLER,

Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES

### DRAWING INSTRUMENTS, &c.

Publisher of the

### Railway Map of the Western States,

In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON Co. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

### MAPS OF EVERY DE CRIPTION.

mh22

## Important to Railroad Companies, etc.



### Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

### RAILROAD FROG-POINTS,

### Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

### ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOT E METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

Ncv 64 Broadway, N. Y.

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

Maps and Reports furnished; Researches made for

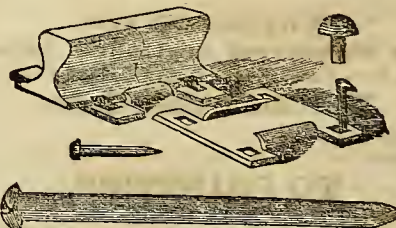
Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists.

Mines explored, new Works laid off, and Geological maps prepared. mail-ly

### GREAT WESTERN

### Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

feb 28 CORBY, GOSSA & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

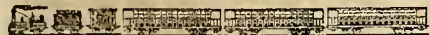
WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE &amp; CRAWFORDSVILLE, and the TERRE HAUTE &amp; ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

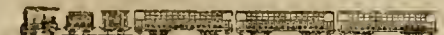
Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

July 10 Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

cc32m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

## THROUGH TICKETS VIA.

WHEELING,  
PITTSBURGH,  
DUNKIRK,  
BUFFALO  
NIAGARA FALLS,  
To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Springfield in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus. One train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan 2

1856.

1857. Spring Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

## NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

## "STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburgh Philadelphia, &c. Same train connects Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 M.

## RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:30 P. M.

Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M.

For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Fr'ght. Ag't.

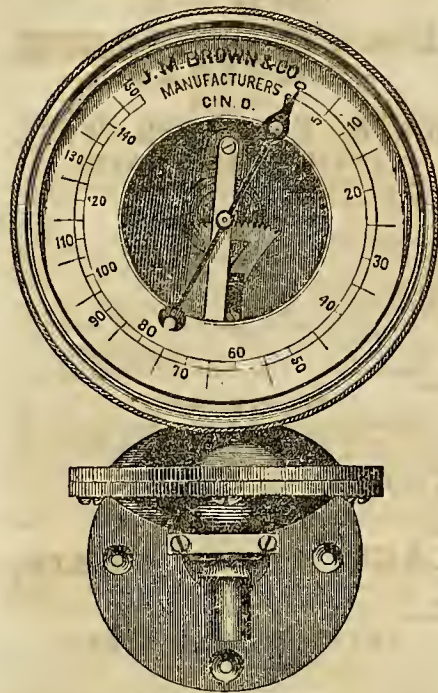
Indianapolis, Sept. 10, 1856.

[mh29-17.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR

### LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar 26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

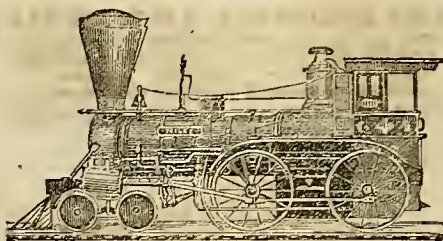
### DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI,

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, shafting, &c. &c.  
Feb. 13 1855 6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON &amp; CO.

New York, Ap 3, 1856. 9 South William Street.

### A. B. LATTA'S

### Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

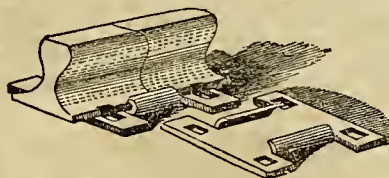
ap 17

A. B. &amp; E. LATTA.

J. D. GREEN.

C. S. GREEN.

### CINCINNATI RAILWAY



### CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN &amp; BRO. PROPRIETORS,

WE have in use improved machinery, capable of turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.  
J. B. GREEN & BRO.

Feb. 14 1y.

### THE SCHENCK MACHINERY DEPOT

AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Up-right Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

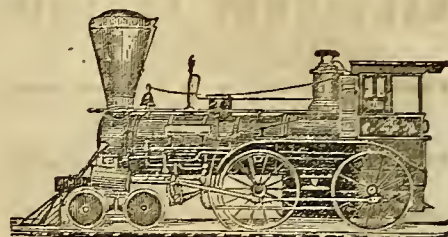
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

## CINCINNATI LOCOMOTIVE WORKS.



THE undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap 20

MOORE &amp; RICHARDSON.

## Railroad Car Findings

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers, Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

### Cotton Duck for Cr Covering,

Of any required width to 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for window and Seats. Varnish. Coach Japan and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport &amp; Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges &amp; Co., Fitchburg, Mass.

†oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

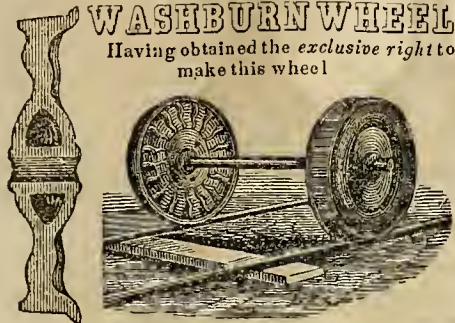
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps at a Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1853 1



# FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati.— Their facilities for manufacturing are extensive, and the means of transportation, to the different points, speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

# MUSKINGUM WORKS ZANESVILLE, OHIO.



## DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

## CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

## WASHBURN WHEEL.

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

## BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
janl. Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

## DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,  
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th JOSEPH DAVENPORT.

## S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j NEWARK, N. J.

# ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or  
Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points; varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-1y 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

## ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

## RAILROAD MAP OF UNITED STATES

NOW READY.  
A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, 55] 3 College Hall, Cincinnati O.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July 31

## THOMAS D. STETSON, Mechanical Engineer,

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

aug14 1y **P. DUDLEY,**  
President of the Board.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 56 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** febl9-1m 9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** no13 10 Wall st., near Broadway, New York.

## IRON BOILER FLUES, PASCAL IRON WORKS.

## MORRIS, TASKER & CO., Manufacturers of LAP-WELDED BOILER FLUES,

1 1/2 to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA. [aug

## RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.] **A. H. GOODMAN & CO.,**  
no. 7 Wall st., N.

## RAILROAD CAR AND

## COACH TRIMMINGS. DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS OF

**Plain and Figured Mohair Plush,**  
Printed & Unent do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Enameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width.**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in bond for exportation.  
sep13 **DOREMUS & NIXON.**

## RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN,

EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb5-tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point at which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

dec11 Second avenue, corner of 22d street, N. Y.

**T. F. RANDOLPH & BRO.**

Mathematical Instrument Makers,

N. W. Cor. 5th &amp; Walnut sts.,

CINCINNATI, O.

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

**RAILROADS, STEAMBOATS,**  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened, the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order.

For sale, wholesale, and retail, by

GRAY, HEMMINGRAY &amp; BROTHERS,

dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Sluic Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE &amp; CO.,

jan8-ly 119 Walnut st., Odd Fellows' Building

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton &amp; Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made to difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,**

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

spc3

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.

ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C.

aprl2

**Thorough Bred Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.







## Railroad Daguerreotypes.

No. LXXXII.

### TENNESSEE & ALABAMA CENTRAL R. R. OFFICERS.

President—Dr. JONATHAN McDONALD, Limestone county, Ala.

Treasurer and Secretary—JOHN T. TANNER, Athens, Ala.

Chief Engineer—J. F. STEELE, Huntsville, Ala.

#### DIRECTORS.

LUKE PRYOR,  
T. H. HOBBS,  
J. R. MASON,  
W. W. PHILLIPS,  
C. F. M. DANCY,  
J. W. SLOSS,  
HENRY FENNEL,  
THOMAS RENDS.

The ANNUAL MEETING of the stockholders is held on the 22d of November.

The CAPITAL STOCK of the road is:

No. of shares.....7,365.  
Price per share.....\$25.

#### DETAILS OF CONSTRUCTION.

Length of road.....28 miles.  
Termini.....Decatur, Ala., and Junction with Cent. Southern R. R., at State boundary line, Ala. & Tenn.  
Gauge.....5 feet.  
Length of rail-bars.....20 feet.  
Weight per yard.....59 lbs.  
Ties.....Post Oak, White Oak & Chesnut.  
Length.....8½ feet.  
Size.....8 by 8 inches.

REMARKS.—The Florida & Alabama Central R. R. lies wholly in Alabama, the design of which was to connect North and South Alabama by the shortest central route. Chartered in 1853; Surveys from Tennessee Road at Decatur, Ala., to Elyton, Ala., were completed in 1854—distance 92 miles. From Elyton it is proposed to continue the road until a connection is made with some gulf road, so that Northern Alabama will have the advantages of a gulf port. The line passes through a country unsurpassed in mineral wealth (coal and iron) yet the population is so sparse that unless the State aid in construction the road cannot be continued farther than Decatur, its present southern terminus, unless by foreign capital.

The county of Limestone, Ala., subscribed by taxation the sum of \$200,000, payable in ten years (\$20,000 per annum). Continued from Decatur north it unites at the State boundary line with the line of road now being built from Columbia Tenn., and styled the Central Southern R. R., which is a continuation of a trunk line from Nashville—the Tenn. & Ala. R. R. From Nashville the trunk goes north through the State of Kentucky, and will unite the valley of the Ohio and the Northern Lakes direct and centrally with the Gulf of Mexico. This portion of the line, and also the Tennessee portion, are both let to contract, and will be in running condition by January, 1859. All the contract-

ors on this portion receive as part pay 20 per cent. in capital stock.

As the road progresses, I will advise you. We have made no purchase of iron as yet. It is contemplated to use the T pattern, 59 lbs. per yard.

J. F. STEELE,  
Chief Engineer.

No. LXXXIII.

### LEXINGTON & FRANKFORT R. R.

The report of this company is dated May, 1857. The following are the officers:

President—EDWARD D. HOBBS, Louisville.  
Treasurer—F. R. HUNT, Lexington.  
Secretary—B. G. THOMAS, "  
Superintendent—SAM. GILL, Louisville.

#### DIRECTORS.

F. K. HUNT,  
M. C. JOHNSON,  
BENJ. GRATZ,  
JOEL HIGGINS,  
W. A. DUNLEY,  
P. SWIGERT.

The ANNUAL MEETING of the stockholders is held on the third Monday in May.

The CAPITAL STOCK of the road is:

No. of shares.....4,304.  
Price per share.....\$100.  
Capital.....\$430,400.  
Interest.....6 per cent.  
Am't of last dividend...3 per cent. for 6 mos.

The DEBTS of the road are:

1st mortgage.....\$155,000.  
Interest.....6 per cent.  
When due.....1858, 1864, 1869, 1874.  
Where payable.....Lexington, Ky.

#### RUNNING EQUIPMENTS.

No. of locomotives.....4.  
Passenger cars.....3.  
Baggage ".....1.

The following are the results of operation for the year 1857. Fiscal year ends April 30:

#### RECEIPTS.

Passenger.....\$50,809  
Freight.....40,853  
Mails.....3,102  
Express.....1,040  
Cost of operation.....\$44,725

#### DETAILS OF CONSTRUCTION.

Length of road.....29 miles  
Termini.....Lexington & Frankfort.  
Width of gauge.....4 feet 8½ inches.  
Single track.....29 miles.  
Sidings.....3 "  
Length of rail-bars.....18 feet.  
Weight per yard.....56 lbs.  
Kind of iron.....English.  
When laid.....1849.  
Kind of rail.....T.  
Ties.....2000 per mile.  
Kind of wood.....Locust and Cedar.  
Length.....7½ feet.  
Size.....6 by 8 inches.  
Ballast used.....Broken stone.  
Kind of fuel.....Wood.  
Am't per annum.....2500 cords.

REMARKS.—The Louisville & Frankfort and Lexington & Frankfort Railroads operate under joint officers, and have been controlled by an executive committee from the several roads since January 1, 1857. We send you a copy of by-laws and agreement of joint operation.

## Railroads.

### LEXINGTON & FRANKFORT R. R. CO.

We give below the Eighth Annual Report of the Directors of this company for the year ending April 30, 1857:

"We are gratified to be enabled to exhibit a statement showing as prosperous a condition of your road as at any past period of its history. We have declared out of the net receipts two semi-annual dividends of three per cent. each, and appropriated nearly two per cent. to a sinking fund, which leaves a balance of more than two and one-half per cent. upon the capital stock, which has been placed to the credit of a contingent fund, to provide for accidents and depreciation not covered by the ordinary expenditures.

"It would be proper to remark that every item of expense to which the company is subjected is charged either to the ordinary expense accounts or to the contingent fund, no part being charged to construction.

"The sums appropriated to the sinking and contingent funds have been invested in good securities, which are represented in your balance sheet by 'Bills Receivable' and 'Bonds Receivable,' which mature at such times as your future necessities for payment of debt may demand.

"Your indebtedness is now composed of

\$35,000 in bonds payable in July, 1864,	
70,000 " " " " 1869,	
25,000 " " " " 1874,	

And twenty-five thousand dollars of bills payable maturing in July, 1858. It will thus be seen that the time of payment of twenty-five of your fifteen-year bonds, as originally issued, have been extended five years, thus enabling you to reduce to a small extent the amount of your semi-annual appropriation to a sinking fund.

The receipts of your company from all sources for the year just terminated, have been.....\$95,807 59  
And the expenditures, including interest, have been.....50,095 46

Leaving as net profits.....\$45,712 13

Which have been appropriated as above explained.

"It will be seen that the interest account is much less than the regular interest upon the debt, which is accounted for by credits which that account has received from interest on money deposited in bank, and the discounts and interests from bonds and bills receivable. The interest in the form of discounts on these bills receivable will not be realized to their maturity, and cannot, therefore, annually increase our interest account.

"The transportation department has earned for the year \$94,765 64, and has expended in conducting same \$44,725 77, which sum is only 47 2-10 per cent. of the earnings; a result very favorable, as compared with any previous year, and equally so when compared with the results of the most economically conducted roads in any portion of the country.

"In pursuance of authority obtained at the



last session of the Legislature, and of the vote of the stockholders of both roads, an agreement for the joint operation of your road and that of the Louisville & Frankfort Railroad has been effected, and the roads have been operating in accordance therewith since January 1st, 1857. The experience of the last four months justifies us in the belief that all our most favorable hopes of increased reduction of expenses, will be fully realized, and the entire harmony of the interests of the roads secured. In the equalization of the value of rolling stock, machinery, and materials contributed by each company, your company became indebted to the Louisville & Frankfort Railroad Company in the sum of six thousand two hundred and twenty-four dollars and fifty-six cents, which has been paid them out of the contingent fund. You have thus become possessed of additional interest to that extent in such rolling stock, materials, &c.

"We have also made a subscription to the Lexington & Big Sandy Railroad of \$50,000, in conformity to and upon conditions required by your vote at your special meeting in January. We are fully satisfied of the great importance to this company of the completion of that road, and trust that all obstacles to its rapid execution may be speedily removed.

"The equipment of your road and all its buildings and station houses, road bed, &c., are in good condition, with ample rolling stock for any present demand upon it.

"The economy of the operation of your road, and the uniform regularity of your trains in their times of arrival and departure, assure us of the continued faithfulness of your employees.

"We refer you to the accompanying tables as explanatory of any other matters of interest."

## BALANCE SHEET, MAY 1ST, 1857.

	Dr.
To cash.....	\$ 9,218 23
Construction.....	583,541 43
Bills receivable.....	29,731 66
Deferred interest.....	3,685 00
Real estate.....	3,391 32
Bonds receivable.....	5,000 00
Louisville & Frankfort & Lex. & Frankfort R. R. Co., for rolling stock materials in joint account.....	74,714 19
	\$708,691 93

	Cr.
By stock.....	\$430,404 00
20-year bonds.....	25,000 00
15 " ".....	70,060 01
10 " ".....	35,000 00
Bills payable.....	26,499 50
Stock profits.....	56,593 98
Profit and loss, being materials in possession of Lou. & F. & Lex. & F. R. R. Co.,	13,532 92
Dividend No. 1.....	443 99
" " 2.....	133 19
" " 3.....	224 97
" " 4.....	5,874 99
Sinking fund.....	16,363 60
Renewal and contingent fund.....	15,308 66
Dividend No. 5.....	12,912 12
	\$708,691 93

## PROFIT AND LOSS ACCOUNT, SIX MONTHS ENDING 30TH OF APRIL, 1857.

	Dr.
To repairs on road.....	\$ 6,845 91
Fuel.....	1,450 02
Oil.....	625 56
Wages.....	7,366 51
Repairs machinery.....	4,219 37

Ballast.....	195 95
Repairs buildings.....	916 68
General expenses.....	1,078 34
Gratuity.....	63 87
Damages.....	111 86
Water supply and water stations.....	290 50
Cross ties.....	476 35
Balance.....	94,230 42
	\$47,871 94

	Cr.
By old iron.....	\$ 13 75
Rent.....	538 00
Freight.....	92,472 93
Passengers.....	23,621 51
Mail service.....	1,225 55
	\$47,871 94

	Dr.
To interest on debt.....	\$ 2,685 27
Dividend No. 5, 3 per cent.....	12,912 12
Sinking fund.....	4,000 00
Renewal and contingent fund.....	4,633 03
	\$24,230 42

	Cr.
By balance.....	\$24,230 42
PROFIT AND LOSS ACCOUNT FOR TWELVE MONTHS ENDING 30TH APRIL, 1857.	

	Dr.
To repairs of road.....	\$11,964 38
Fuel.....	3,221 53
Oil.....	962 05
Wages.....	14,398 37
Repairs of machinery.....	8,615 58
Ballast.....	860 10
Repairs building.....	1,481 77
General expense account.....	2,218 15
Damage.....	173 12
Water supply and water stations.....	290 50
Cross-ties.....	476 35
Gratuity.....	63 87
Balance.....	61,081 82
	\$95,807 59

	Cr.
By mail service.....	\$ 3,102 80
Rents.....	1,028 00
Freights.....	40,853 66
Passengers.....	50,809 18
Old iron.....	13 95
	\$95,807 59

	Dr.
To interest on debt.....	\$ 5,369 69
Dividends Nos. 4 and 5.....	25,820 91
Sinking fund.....	8,243 60
Renewal and contingent fund.....	11,647 62
	\$51,081 82

	Cr.
By balance.....	\$51,081 82

## MILES RUN BY KNOXES.

Passenger trains.....	37,919
Freight ".....	20,053
Other ".....	4,063

Year 1854-5. 1855-6. 1856-7.

Receipts per mile run in cents.....	143	149.5	154
Expenses ".....	89.4	80.48	73
Ratio per centage of expenses to receipts.....	62	53.8	47.2

The officers of the company are:

President—E. D. Hobbs.

Directors—Benj. Gratz, M. C. Johnson, F. K. Hunt, P. Swigert, W. A. Dudley, Joel Higgins.

Superintendent—Samuel Gill.

Secretary—B. G. Thomas.

This company is now operated conjointly with the Louisville & Frankfort R. R. Co. The following are the articles of agreement: "The Lexington & Frankfort and Louisville & Frankfort Railroad Companies, with a view to a more intimate union of interests and management of their respective roads, have mutually agreed as follows, to-wit:

"ART. 1. From and after the first day of January, 1857, the whole line of road from Lexington to Louisville shall be run as one road.

"ART. 2. The entire charge of the operations of the road shall be vested in an Executive Committee, to be composed of six members, viz: Four from the Louisville & Frankfort Railroad Company, and two from the Lexington and Frankfort Railroad Company; whose term of office shall be till their successors are appointed. The Directors of each road shall, after their respective annual elections by the stockholders, appoint from their respective boards the Executive Committee. The said boards, respectively, shall fill all vacancies occurring in the Executive Committee.

"ART. 3. The Executive Committee shall meet at least once in each month, at such times and places as they may appoint. Special meetings may be called and held at the request of any two members in writing. Each member shall have his expenses paid when absent from home on the business of the companies.

ART. 4. The Executive Committee shall keep a fair record of their proceedings. They shall recommend to the companies a gentleman as President of both Boards, if the two Boards of Directors are unable to agree upon a joint President. The Executive Committee shall select their own Chairman, who shall be vested with such powers as may be necessary for the proper working of the road; and his compensation shall be fixed by the Executive Committee. If the two boards shall agree upon a common President, he shall attend on and preside over the meetings of the Committee; but the President shall have no vote unless he shall have been selected from the Executive Committee. The Committee shall fix and determine his salary.

"ART. 5. The concurrence of a majority of the Executive Committee shall be necessary to any valid action; and in all propositions in relation to the number of through trains per day, or in relation to the hours of their arrival or departure at or from Lexington, and on all questions affecting permanently the Lexington & Frankfort Road, said majority shall contain at least one member representing said Lexington & Frankfort Company.

"ART. 6. The Committee shall appoint and remove at will a Superintendent and other officers, and shall fix their compensation. They shall cause a set of books to be kept in Louisville, in which shall be entered all the business of the joint roads; from these books shall be made a condensed monthly statement showing the gross receipts, the general expenses, the sums spent for repairing or renewal of each road, and the cash balances, as near as can be estimated, due each railroad company—a copy of which statement shall be transmitted to the Directors or railroad company, and the balance due each company shall be paid to the Directors of each road, or such receivers as they may appoint monthly.



"ART. 7. The Executive Committee is invested with all powers necessary to carry out the provisions of this agreement according to its true intent and meaning. Should any question arise which cannot be settled by themselves, they may refer the same to three arbitrators in no wise connected with either company, one to be chosen by the Board of each company, and the third by the two so chosen, whose decision shall be final.

"ART. 8. The basis of all apportionments of profits and expenditures, &c., &c., (except as provided for in articles Nos. 11 and 13) shall be in proportion to the length of the two railroads, which together are ninety-four miles, viz: twenty-nine parts of the ninety-four to the Lexington & Frankfort Company, and sixty-five parts of the ninety-four to the Louisville & Frankfort Company.

"ART. 9. Previous to an amalgamation, an inventory for each road shall be taken, of all locomotives, cars, depots, water stations, side tracks, switches, machine shops, and other buildings used by either road. Also, of all fuel and materials on hand of every description, and these inventories shall be matters of record.

"ART. 10. At the time of the amalgamation each road shall furnish its proportion of all rolling stocks—locomotives and cars of all kinds necessary for working the entire roads. Also, all fuel and materials of every description. And if the above mentioned inventories show that either road is deficient in any of the machinery or materials necessary for the proper working of the joint road, the road company so deficient, on notice from the Executive Committee, shall supply such deficiency with reasonable dispatch. Either Company having an excess may dispose of it at its discretion.

"ART. 11. There shall be an account kept for each road, in which shall be charged all expenditures for repairs or renewals of road, depots, water stations and fixtures of every kind, and for the construction of all new buildings (not excepted in Article No. 12), switches, side-tracks, &c., &c. All expenditures of the character above mentioned made for the Lexington & Frankfort Road shall be charged in an account headed, 'Repairs and renewal of the Lexington & Frankfort Road,' and those of the same character made for the Louisville & Frankfort Road shall be charged in account headed, 'Repairs and renewal of the Louisville & Frankfort Road.' In each of these accounts shall also be charged all ballasting that may be found necessary to be done on either road.

"ART. 12. All sums expended for any structures or additions to or enlargements of any structure necessary for the proper working of the joint roads, but which would be unnecessary for either road if worked separately,

shall be paid out of the gross receipts and charged to general expense account.

"In case of a dissolution, referees shall be appointed, one by each company, and an umpire by the two, who shall, upon personal examination of any such structure so built or enlarged, determine its value, if any, to the company upon whose road it was built or enlarged, and thereupon the said company shall pay to the other its proportion of such value on the basis as affixed in Article 8th.

"ART. 13. All taxes on the capital stock or other property, and insurance on buildings or other property not connected with the working operations of the road, and all salaries of such officers as the two Boards of Directors may think proper to employ, shall be paid by the company respectively owning such property or employing such officers; and all monies arising from rents and other sources not connected with the working operations of the road, shall accrue to the benefit of the company owning the property from which the same is derived.

"ART. 14. All expenses necessary in working the road, except those designated in Articles Nos. 11 and 13, and all taxes on property necessary for the working of the road, such as depot buildings, machine shops, &c., &c.; all sums paid for renewals of rolling stock, and for damages, law suits, &c., shall be charged to general expense account.

"ART. 15. From the gross receipts shall be deducted all sums charged to general expense account, as provided in Articles Nos. 12 and 14, and the balance shall be placed to the credit of each railroad company, in the proportion as stated in Article No. 8. The sum expended for each railroad, under Article No. 11, shall be charged to each road company for which it was expended, and the residue paid to each company. All the accounts of the Executive Committee shall be made up to the 30th of June in each year, and a transcript sent to both companies.

"ART. 16. Amendments to this agreement may be proposed by either company, or by the Executive Committee, and, if assented to by the Board of both companies, shall be binding as parts hereof.

"ART. 17. This agreement may be annulled by either company at any time, after six months' previous notice in writing; and, in the event of such dissolution, a division of the rolling stock and other property belonging jointly to the two companies shall be made on the basis as stated in Article No. 8, and a complete settlement shall be made in accordance with the various provisions of this agreement.

"ART. 18. This union, if ratified by the stockholders in each company, as provided for by law, shall go into effect on the 1st day of January, 1857; it being, however, distinctly understood that the Louisville & Frankfort

Company shall, with its own means, complete the bridge across the Kentucky river at Frankfort, if the same be not completed before that time, and shall, as now, be alone liable for any damages or injuries occurring at or on said bridge before its completion.

J. O. HARRISON,  
President Lex. & Frank. R. R. Co.  
E. D. HOBBS,  
President Lou. & Frank. R. R. Co.

#### MICHIGAN SOUTHERN RAILROAD REPORT.

As the time is at hand when the enterprise undertaken by the MICHIGAN SOUTHERN and NORTHERN INDIANA RAILROAD COMPANY will be completed, the Directors in making their annual report, deem it a proper occasion to review the nature and extent of their various operations, to exhibit the condition and value of the properties which have been thereby created, and to glance at the prospects of continued success presented to them in the increasing developments of the extensive regions of country with which they are connected.

This Company, it is well known to the stockholders, originated in a plan projected by the State of Michigan, for connecting the waters of those immense reservoirs of trade, Lake Erie and Lake Michigan, by means of a system of railways across the peninsula. The plan was but partially carried out by the State, when its financial embarrassments compelled it, in the year 1846, to discontinue the works, and to dispose of its roads to private companies.

The Southern road, as surveyed and laid out by the State, began at the town of Monroe, on La Plaisance Bay, near the head of Lake Erie, and following a line due west, passed through the southern tier of counties in Michigan, from county seat to county seat, till it terminated at New Buffalo on Lake Michigan. At the time of the transfer of this road to the private company, it had been completed, in the imperfect manner of those days, *i. e.*, with the flat bar rail, wooden culverts, &c., from Monroe through Adrian, the county seat of Lenawee County, to Hillsdale, the county seat of Hillsdale county, a distance of 68 miles, together with a branch, 10 miles north from Adrian to Tecumseh, making in all 78 miles actually constructed, on which the State expended upwards of \$1,300,000.

The charter under which the Southern Michigan Railroad Co. took possession of this road was a perpetual one, carefully prepared as to its terms, liberal in its provisions, and not subject to alteration, except by consent of the Corporators. Under it the Company were authorized to extend the road westerly to Lake Michigan, either by the route originally contemplated, or by any other more southerly route which they should deem more practicable. They were induced to adopt a more southerly course by the following considerations: First, to avoid competition and conflict with the Central Railroad Company of Michigan, whose line the State had proposed to terminate at St. Joseph, on Lake Michigan, but who had decided to make New Buffalo, considerably further south than St. Joseph, their terminus, with the view of extending their line around Lake Michigan to Chicago: Second, to meet the demands of the great trade between the East and West, which it was then becoming evident would not move directly across the lakes, (which were closed in winter,) but around them; and, Third, to obviate a threatened competition through the northern parts of the States of Ohio and Indiana.

Those States had previously incorporated the Buffalo, and Mississippi Company, for the purpose of constructing a road from Toledo, (18



miles south of Monroe) due west, through the northern counties of Ohio and Indiana, to Chicago, the head of Lake Michigan. Such a road, it was obvious, would connect the head of Lake Erie with the head of Lake Michigan directly; it would command the large and growing trade springing up between those important points; and it would form a principal link in the vast chain of communication between the East and West. But as it proposed to run only fifteen or twenty miles south of the proposed line of the Southern Michigan Road, and nearly parallel to it all the way, it was equally obvious that both roads could not be constructed, or that if constructed, they must become rivals to an extent seriously damaging the interests of both. In this emergency, therefore, the friends of the two enterprises considered the feasibility of a union. It was found that by starting from Toledo, and running northwesterly to Adrian, and thence westerly, on the line of the Southern Michigan Road, through Hillsdale to Coldwater, thence again in a southwesterly course into Indiana, the line of the proposed Buffalo and Mississippi Road might be adopted. This route was somewhat longer than the proposed direct route from Toledo, but it was considered, at that early day, that the difference would be compensated by the extinguishment of a rival line and by the superior populousness of the bordering districts. The union was consequently effected by the assumption of the Buffalo and Mississippi Charter by the Southern Michigan Company.

In order to carry out this important plan, however, it became necessary to connect Toledo with the Southern Michigan Road at Adrian. As early as 1835, the Erie and Kalamazoo Railroad Company had been incorporated by the territory of Michigan, for the purpose of making a railroad from Toledo (which was then embraced in that territory, but was afterwards transferred to the State of Ohio) to Kalamazoo in the interior of Michigan; the object being to open the market at the head of Lake Erie to that fertile and rapidly growing interior. This road had been completed, also, as far as Adrian, and, owing to the rivalry of the cities of Monroe and Toledo, had been run in opposition to the Southern Michigan, as far as finished; but the Southern Michigan Company acquired a perpetual lease of it in 1849, which not only extinguished the opposition, but brought their road immediately in connection with Toledo.

From Hillsdale, westward, the road was energetically prosecuted according to the charter obtained from the State of Michigan. But, as the line of the road, after leaving the southern boundary of the State, must pass, in order to reach Chicago, through the States of Indiana and Illinois, the western part of the line of the Buffalo and Mississippi Company was used, from the point of intersection to the western boundary of Indiana, (about 100 miles,) and another company was organized under the general Railroad law of Illinois, to complete the remainder (about 13 miles) in Illinois. These several companies, having but one common interest, and having procured from the Legislatures of the several States every due authority, pushed their work with all the rapidity consistent with solid and durable construction. In the course of the years 1850 and 1851, up to May 1852, the old roads were substantially repaired and improved, and the entire line was opened from Hillsdale to Chicago. The Directors' report for the year 1853, states that in about 20 months, embracing two winters, (one of them peculiarly severe for such work,) the companies constructed 160 miles of new road, and relaid and nearly rebuilt 50 miles of the old road—a fact without precedent in the history of railroad enterprise.

The charter incorporating the Michigan

Southern Company made it their duty to extend the Tecumseh Branch to the village of Jackson, (about 41 miles,) situated on the line of the Michigan Central Road. This work the company deferred until after the completion of their line, when they caused surveys to be made and began the work, which was finished as far as Manchester (23 miles) in 1855; and it would have been entirely completed by this time, but for an injunction restraining the approach to Jackson, which, however, has recently been dissolved, so that the remaining portion will be finished by the first of July. This branch will likely be extended as far north as Lansing, which is the State capital, by another company, when it will become a still more important feeder than it is already to the main line. Besides this, it may be stated that this company has a branch of four miles from White Pigeon to Constantine, a branch from Baileytown in Indiana 14 miles, to Michigan City; and a joint ownership with the Chicago and Rock Island Company of five miles of road entering Chicago.

The Directors of the Northern Indiana Company, in pursuance of the original plan of securing the best line of railroad that could be built between Toledo and Chicago, and for which they had at an early day obtained the corporate right, under the Buffalo and Mississippi charter, authorized a survey to be made in 1852. It appeared from this survey that such a road could be run between Toledo and a point in Indiana, varying in length not over 2 per cent. from the air line. There were but few curves in the whole of it, and one stretch of seventy miles in length, perfectly straight, while the maximum grade, going West, was but twenty feet in the mile, and going East, but ten. Under these circumstances, and with the certain prospect of reducing the distance between Toledo and Chicago, the road was vigorously undertaken in 1853. The whole distance was 130 miles, including ten miles from Elkhart to Goshen, already finished, and the Directors confidently expected that it would be complete by September of 1856. But they were disappointed in this expectation, owing to causes beyond their control, although they are now happy to say that it is now finished and will soon be brought into full operation.

According to the report of the engineer, the work has proved more difficult of execution than was anticipated; the excavations were harder; large losses have been occasioned by the sinking of marshes; double the width of clearing has been made; ballasting material has been found more expensive, while the seasons have shown themselves very unfavorable. Two sickly periods, and one very rainy one, have impaired the efficiency, and at times caused a temporary cessation of labor. The cost of the undertaking, in consequence of these drawbacks, to which may be added the increase of wages, and the fact that the rails have been selling at higher prices than heretofore, together with the loss of interest growing out of the delays, will be considerably enhanced beyond what was at the outset contemplated.

The stockholders of this Company were apprised by a circular report of Jan. 15, 1856, that an arrangement had been made for constructing a road from Toledo, by way of Monroe, to Detroit, by which our lines would be connected with the latter important city, and with the Great Western Railway of Canada. At the same time they were informed that the Directors considered this line of so much moment to the interests of this Company that they proposed, in order to encourage its construction, to take a permanent lease of the road, by guaranteeing an annual dividend upon its stock of 8 per cent.

At the annual meeting of our stockholders, in April 1856, a resolution authorizing and requesting the Directors to enter into the pro-

posed arrangement was unanimously adopted. In pursuance of it, a lease in perpetuity of the road from Toledo to Detroit was taken, on the condition of assuming the liabilities of the road for construction, and the payment of 8 per cent. dividend upon its full paid up stock from the time of its completion. The work on the road has since been vigorously prosecuted, with a view to bring it into use at the earliest period; the contract for construction was made on the 10th of July last; and the Directors have great satisfaction in stating that the line between the cities of Detroit and Monroe (thirty-eight miles) was opened for business on the 25th of December last. By this means a continuous track from the city of Chicago to the city of Detroit, operated by this Company and belonging to it, has been established. The residue of the line, from Monroe to Toledo, (120 miles,) will be finished in the course of the present Spring, and previous to the 1st of July next. That they might insure the result, the Directors have made the requisite advance of money to cover the cost of the road thus far, holding as security therefor \$1,000,000 of the first mortgage bonds, at 7 per cent. of that road, and also \$352,000 of its full paid capital stock.

Owing to the unfavorable state of the money market during the past season, it was not practicable to negotiate, at satisfactory rates, the stocks and bonds of the new line; yet the Company felt it to be their duty to press forward the work, and for that purpose incurred a debt which it is necessary to provide for.

We have omitted to record in its proper historical place, in order to state the fact in this connection, that in 1855 the Michigan Southern and Northern Indiana Companies became a single corporation, under acts passed successively by the Legislatures of the States of Ohio, Indiana, Illinois and Michigan, in which States their various properties existed. The articles of consolidation were executed on the 26th of April of that year, and were unanimously sanctioned and approved by the stockholders of the respective corporations. In this way a most desirable consummation was attained, and the owners of the several lines may now regard themselves as the possessors of a railroad, which, beginning at a central point in the city of Chicago, passes around the head of Lake Michigan, through populous and fertile districts of four States, to terminate at the two most important centres of trade at the western head of Lake Erie. They will be, on the 1st of July, 1857, the possessors of 536 miles of iron way, thoroughly built, completely equipped, touching many opulent and growing towns, draining vast regions of production, and forming part of a trunk line, with numerous lateral connections, between the Atlantic Ocean and the Mississippi River.

The roads just enumerated are:

	Miles.
Main line, from Chicago to Toledo.....	242
Goshen Air-Line, (from Elkhart to Toledo).....	132
From Toledo to Detroit.....	58
From Adrian to Monroe.....	37
Jackson Branch.....	41
Branch to Constantine and Three Rivers.....	12
Michigan City Branch.....	14
Making in all.....	536

The station and freight houses, and the grounds connected therewith at the several depots along the line, and at the termini of the Road, have been provided on a substantial and liberal scale. These buildings are many of them costly, and the grounds very valuable.

The station at Toledo occupies what is called the Middle Ground in the Maumee River and covers 26 acres of ground connected with the city by means of a bridge. About \$1,000,000 has been expended upon the improvements at this point, and a section of the road connected with it about three miles in length; but



when finished, the station will be one of the most extensive and complete in the whole country, and admirably adapted to the accommodation of the business which is there concentrated. It was deemed advisable, in locating and planning these grounds and buildings, to render them accessible to other important lines terminating or connecting at Toledo, and the object has been justified by the arrangements since entered into with them, which secures to this Company, in the form of annual rent, interest upon a considerable part of the cost.

The lands connected with other stations have greatly increased in value, during the last three years, and at Chicago particularly, where we have secured ample room, it may be estimated that this increase, since the purchase, has not been less than \$300,000.

These roads pass through four States, Ohio, Michigan, Indiana and Illinois, having an aggregate population in 1850 of 3,300,000, they touch nineteen counties of those States having a population of nearly 300,000, and which must be quite double that now; and they have stations at nearly 100 thrifty and well-peopled towns. They are directly connected with four important lines of railway, running south through Ohio and Indiana, and with all the railroads and steamboats diverging from Toledo, Detroit, Monroe and Chicago.

Our line of road is thus brought into immediate relation to hundreds of thousands of people, with all their varied industries and interchanges, and is enabled to command a large local traffic, which profitable as it is at present must increase with the increasing population and wealth of the country. But the local business is only incidental to the more extensive trade carried on between the seaboard and the almost immeasurable inland valleys. Before speaking of this, however, let us contrast the present with the past, as a basis of conjecture for the future.

At the time our enterprise was begun the railroad system of the United States was in its infancy. By casting an eye upon a map prepared for the year 1850, when our main line was barely commenced, it will be seen that there was then no direct railroad connection between the East and West, none between the south bend of the two great lakes, no important channel of trade ending at Toledo, except the Wabash and Erie Canal, and no vast ramification of roads and canals branching out from Chicago.

Those extensive districts of country lying to the west and north of that city were intersected only by common roads and a few inconsiderable streams. But by consulting the map, as it appears in 1857, it will be seen what advances have been made in all these respects. The Canada line from Detroit to Niagara has since been constructed. The South-shore lines, running from Toledo, through Sandusky, Cleveland and Erie to Buffalo, and connecting at these places with the trade of the Lakes, and with the magnificent railroad systems of Ohio, Pennsylvania, and New York, have since been all completed. By these lines, which are but a continuation of the Michigan, Southern and Northern Indiana Railroad, it is brought into direct relation with the cities of Cincinnati, Pittsburg, Baltimore, Philadelphia and New York. When the line extending east from Cleveland by way of the Cleveland and Mahoning, the North Western, the Pennsylvania Central, and the Allentown and New Jersey Central Roads, shall be completed (nearly all of which are now in operation, and the remaining links are expected to be supplied within the ensuing year,) our line will furnish the shortest possible route from Philadelphia and New York to Chicago and the Mississippi. And this line will have the very great advantage of an unbroken gauge, which will enable freight to be sent without transshipment from the ocean to a point in the heart

of Iowa, nearly one hundred miles west of the Mississippi, and which, by the steady westward extension of the line, will soon reach the Missouri at Council Bluffs.

The many and important roads which have made Chicago the great metropolis of the Northwest, have been constructed within the time in which our own was in progress. And of these roads it is important to remark, that the greater part of them are tributaries to the Michigan Southern and Northern Indiana Road, and none of them, in any sense of the word, competitors. Of the great roads of the North-west, Chicago is the common center—a city which, at the onset of our works, contained less than 30,000 inhabitants, and which has now 120,000—which then shipped annually but 2,000,000 bushels of grain, and now ships 20,000,000—which in 1851 had but 42 miles of railroad terminating in it, and which has now 2,933 miles, of which 2,075 may be called importing railroads, which bring freight and traffic from the West and Northwest. Among these roads, conveying into Chicago the inexhaustible wealth of the interior, may be mentioned the Chicago and Rock Island, extending to the Mississippi, and by means of the Mississippi and Missouri Road, tapping the central part of Iowa; the Chicago, Burlington and Quincy, from South Iowa; the Illinois Central, traversing the length of the State of Illinois; the Galena and Chicago; the Lake Shore, from Milwaukee; and the Chicago, St. Paul and Fond du Lac, which together bring the whole of Wisconsin and the fine copper and iron regions of Lake Superior within range of our western terminus. Yet the prodigious growth of Chicago can scarcely be said to be peculiar; it is rather an example of the general advance of the West. Toledo and other cities exhibit a similar increase, and the entire region to which we look for trade and patronage partakes of the onward movement.

There is no reason, therefore, to apprehend any diminution of the sources of supply to our road; on the contrary, there is every reason for believing that the almost unexampled rapidity of progress which has marked the past will be accelerated in the future. Temporary causes, such as a general failure of crops, or a general prevalence of disease, might abate the prosperity of single years; but there are no causes with which we are acquainted, or which we can conjecture likely to have such an effect for any connected series of years. As long as our country continues in the enjoyment of foreign and domestic peace, the physical developments must continue to improve. For it is to be especially remarked, that the immense regions to which our road is so directly related, the States of Illinois, Iowa and Wisconsin (not to mention the older States of Michigan, Ohio and Indiana), and particularly the Territory of Minnesota, which will, during the present year, be organized into a State, and the regions about Lake Superior, are but just opening to settlement and labor, and have hardly begun to put forth their resources. Iowa was only made a State in 1846, and its population already must considerably exceed half a million. Wisconsin became a State the next year, and has a population of not less than 700,000, and Minnesota is rapidly filling up with people. All these districts possess the advantages of salubrious climate, the most fertile soils, a great variety of natural productions, both mineral and vegetable, facilities of access, and liberal provisions of government. The Lake Superior country, with which Chicago will be brought in immediate communication by the opening of the Chicago, St. Paul and Fond du Lac Railroad, is celebrated for its iron, its copper and its silver, and the resources of it are regarded as incalculable. The iron region alone producing, as proved by scientific analysis and practical experiments, the finest iron in the world—extends, in a breadth of from fourteen to fifty miles, north

and south, and more than one hundred miles east and west, and a single bed of it, according to the United States geological survey, is capable of "supplying the world for ages." Nor do the veins of solid copper promise less abundantly to the hand of enterprise.

Now, all these masses of wealth—the grain, the timber, the minerals, which seek a market in the great eastern centers of commerce—must pass, for an indefinite number of years to come principally around the southern bend of Lake Michigan. There is no other mode for making a way eastward, during one-half the year, when winter shuts up the Lakes. Nor is there any route of conveyance which is likely to divert from the Michigan Southern and Northern Indiana Railroad its full share of that immense traffic.

But those vast and fertile valleys of the northwest are not merely grain fields and mining grounds; they are attractive centers of settlement; every year sends a powerful migration thither, and these emigrants, while they develop the resources of the country, draw supplies from the East. It is estimated that already 200,000 emigrants take up their abode annually in these regions. As the mining resources are developed, this immense emigration must be enlarged. Manufacturing establishments will, of necessity, grow out of the mining operations. All the great West will look to the Lake Superior district for its supplies of iron and copper, and in a few years there will be gathered there a vast and thrifty population. In truth, it would seem rather like imagination than a fact of sober reality, were we to undertake to state in words the rapidity or the extent of the progress which must take place in the Northwest. In both directions, therefore, eastward and westward, the channels of communication and traffic will find a constant demand for their services.

Of those channels, our road is one of the two connecting the Lakes Erie and Michigan; it is the only one connected at the same time with the port of Lake Erie, (Detroit,) and with the southern port, (Toledo,) while it also terminates at a central port, (Monroe); it is the only one having an *unbroken* rail connection with the same gauge, from the Mississippi river to the Atlantic ocean; and it is the shortest one between Chicago, the great trading center of the West, and Philadelphia, New York, and other eastern cities. In the activity and impatience of American enterprise, shortness of distance and quickness of return are controlling facts; but to this great advantage our road adds another, which is, that it stands in immediate connection with the south shore of Lake Erie, studied with important towns, and whither the immense trade between the East and West naturally tends, for the convenience of the lake navigation during the season when it is practicable. Any one, by casting his eye upon a map, will see that Lake Erie is a common reservoir of trade for several of our largest States, and that the southern side of it is that on which are concentrated the large cities and towns.

Thus, in every aspect of the case, the results of the great enterprise in which our Company has engaged are quite sure to justify the original designs and the general course of subsequent management. Now that the heavy drain of construction has come to an end, and the future outlays will be confined mainly to interest on debt, dividends on stock, contribution to sinking fund, and the running expenses, while all the new roads and branches will be brought into productive operation, and thus every point of competition being covered, we may feel assured that the stockholders, as well as the public, will experience the benefits of the achievement, to a larger extent than either of them have yet realized.

In conducting to a successful completion such a varied and extensive undertaking, it can not



be doubted that mistakes of detail have been made—expenses incurred which might have been avoided, and opportunities missed which might have been improved; no scheme of human device and human management is perfect; the most sagacious minds can not always detect the best means of arriving at ends, nor discover errors until they are shown by their results. This is true of all forms of government, from that of States to that of smaller corporations, and there is no wisdom nor prudence so large as to anticipate or obviate all evils. But in looking back over the seven years which have elapsed since the commencement of this enterprise, and within which time these extensive works have been begun and nearly completed, and considering what difficulties, intrinsic and external, have been overcome, what a mass of property has been created, how substantial the work, how generally the credit of the Company has been sustained, the returns which it has heretofore made to the stockholders, and how certain the promise of future fruits, we think that the Michigan, Southern and Northern Indiana Railroad Company has reason to feel satisfied with what it has accomplished, and to present it, in entire confidence, to the favorable judgment of the public.

The Company owns three first class steamers on Lake Erie, which run between Buffalo and Toledo. There is a large travel and business that will go through the lake, to draw which over our railroad, it has been found necessary to keep up this line of steamers, especially as a similar line is maintained by the Michigan Central Railroad Company, along the north shore of the lake.

To keep up regular freight connections with the two great lines of railroads through the State of New York, it has also been found necessary to secure regular lines of propellers between Toledo and Buffalo, and between Toledo and Dunkirk.

This trade by propellers through the lake has been found to produce a very liberal net income.

The road was first opened for use from Lake Erie to Chicago, in July, 1852. The gross earnings for each month since that time are shown in a table annexed.

The earnings of 1856 were reduced from what was anticipated, by the loss of the steamer *Northern Indiana*, early in the summer, which broke up our regular line of boats, and much impaired our business. During the fall of that year they show the effect of the difficulties which occurred upon the Erie Railroad, and which for several months, seriously interfered with the prompt and regular transportation of passengers and freight by that line. The severe winter of 1857 interfered much with the business of many of the Western Roads, and from this cause, our line, in common with some others, shows for that period a slight diminution of earnings.

It will be borne in mind that hitherto the receipts have been derived only from the finished portion of the roads. The Goshen Line, the Jackson Branch, and the Detroit and Toledo Road, all as yet unfinished, are now nearly completed, and have cost, in the aggregate, about the sum of \$5,350,000.

These lines are soon to be brought into full use, and the investment therein made will then become productive. We do not doubt that they will add very considerably to our earnings.

Since the completion of the line to Chicago, regular semi-annual dividends have been paid to the stockholders, which, commencing January, 1853, and ending 1st February, 1857, have amounted in the whole to 59 per cent., being 37 per cent. in cash, and 22 per cent. in stock, as follows:

1853, January, 5 per cent. cash.  
1853, July, 7 per cent. cash.  
1854, January, 10 per cent. stock.  
1854, July, 5 per cent. cash, 7 per cent. stock.  
1855, January, 5 per cent. stock.

1855, July, 5 per cent. cash.  
1856, January, 5 per cent. cash.  
1856, July, 5 per cent. cash.  
1857, January, 5 per cent. cash.  
Total, 37 per cent. cash and 22 per cent. stock.

This shows an average of over 13 per cent. per annum for the entire time since the road was open to Chicago.

The stock of the company is mostly held for investment, and is widely distributed amongst 1,278 stockholders. Most of this stock has been issued to the stockholders directly, and it has generally produced par to the company. The stock has been increased considerably since the date of the last report. This increase is accounted for by the fact that within the last few months new issues have been made, for the purpose of paying the last dividend (the earnings of the company having been appropriated to the construction), and to meet other financial wants of the company. Five hundred thousand dollars of the funded debt matured and was paid in April. The books of the company show that the total discount or loss which the company has sustained in the issues of its stock of nearly \$8,500,000, amounts to less than 4 per cent. upon the average. In other words, the company had actually received more than \$96, upon an average, for each share of its stock already issued; and the statement of dividends herewith made shows that it has been productive property for the stockholders.

The Board has caused full examination to be made into the state of the stock and bond accounts and general accounts of the company; and the reports of the various committees of examination are appended hereto, showing that the accounts are correct.

The sinking fund, established for the redemption of the bonded debt, has enabled the Commissioners to purchase \$143,000 of the bonds, which are now held by them.

The financial statement shows, among the assets of this company, its own securities and stock of the Detroit, Monroe & Toledo Road to the amount of \$347,913 83. It also embraces about \$100,000 of the bonds of the Detroit, Monroe & Toledo Road, as a debt of this company. In pursuance of a vote of the stockholders, in April, 1856, this company has taken a permanent lease of the road from Toledo to Detroit, and has guaranteed the payment of an annual interest upon its stock, and the payment of principal and interest of its bonds. For all practical purposes the road is, therefore, to be regarded as a part of the property of this company, and its debt as our debt. Having made the necessary advances for its construction, this company has received stock of that company to the amount shown in the statement, and also \$1,000,000 of its first mortgage bonds, of which about \$900,000 are still unsold.

The stockholders have also authorized the Board to guarantee the payment of \$200,000 of the first mortgage bonds of the Cincinnati, Peru & Chicago Railroad Company (the mortgage thereon being for only \$10,000 per mile), whose line of road intersects ours at Laporte, and forms a valuable connection for the Cincinnati business. This guaranty has been given, and forms a contingent liability. The road, however, is completed and in successful operation from Laporte to Plymouth, and has paid the interest upon the bonds due to this time; and we have no reason to doubt that it will continue to provide for the interest and for the principal of the debt.

With these exceptions, both regularly authorized at an annual meeting of the stockholders, and both for its manifest interest, this company is not liable in any form for the obligations of any other company.

This company owns stock of other companies which has cost \$380,020 74, and bonds of other companies costing \$356,300. The arrangements made for the purpose of securing favorable business connections with other companies,

which have resulted in this ownership of their securities, were made in 1854, and were mentioned in the circular report made by this company in that year. Although these securities are not now available for sale, it is believed that nearly all of them are good, and that they will ultimately secure a return to the company of its advances. The bonds and mortgages, and the bills receivable shown in the statement, amounting together to \$363,244 69, are, with trifling exceptions, believed to be entirely good. A portion of the amount may be realized soon; but most of it will not be due for some time, and is not, therefore, at present available.

The company is unwilling to sell the \$900,000 of Detroit, Monroe & Toledo bonds, and the remaining sinking fund bonds, at present prices.

It results from the foregoing statements that it is necessary to provide some other mode of meeting the floating debt of the company.

After full consideration, the Board, in compliance with authority given by the stockholders at their last annual meeting, have determined to create and issue a guaranteed construction stock to the amount of \$3,000,000, entitled to dividends at the rate of 10 per cent. per annum (like the 8 per cent. construction stock heretofore issued by the company, except in the rate of dividend).

The stock now offered will be entitled to dividends in cash, payable semi-annually in New York, on the 1st days of June and December. The first dividend will be payable on the 1st day of December next.

This stock has been awarded by the Board, *pro rata*, among the stockholders who shall be such at the close of business on the 15th day of May instant. The stock is awarded at its par value of \$100 per share, payable \$50 per share in cash and \$50 per share in the general stock of this company at par. The cash payments are required to be made: \$15 per share on or before the 20th day of May instant; \$20 per share on or before the 5th day of June, and \$15 per share on or before the 20th day of June next. Payments may be made at any time sooner than above stated, at the option of stockholders. Proper receipts will be issued for all partial payments made, and interest at the rate of 10 per cent. per annum will be allowed upon all cash payments made prior to those dates. Stockholders who may be such on the 20th day of May inst., will be entitled to receive the guaranteed stock in the proportion of four shares of guaranteed stock for every ten shares of the general stock held by them (and in the same proportion for a greater or smaller amount), at any time after said 20th day of May, upon complying with said conditions.

In case any portion of the guaranteed stock is not applied for by the 20th day of May by the parties entitled thereto, the same will be awarded by the company upon the same terms to other parties, stockholders or others, who may first apply for and pay for the same.

In order to enable stockholders not resident in America to participate in the subscription, the proportion of such guaranteed stock to which they may appear to be entitled, will be reserved for them by the company until the 20th day of June next, and will then be distributed to them upon the same terms, if applied for by them, otherwise it will be disposed of to other parties.

The issue of stock upon the terms stated would yield to the company \$1,500,000 in cash and \$1,500,000 in the general stock, which would be then cancelled. The result may be thus stated:

The present amount of outstanding stock is.....	\$8,460,100 00
For the purpose of illustration, call it, in round numbers.....	\$8,500,000 00
There would be retired of the common stock.....	1,500,000 00
Leaving the common stock.....	\$7,000,000 00

[Concluded on page 218.]



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rt.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds	Name of Company.	Quot' of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al'x'ndria, Lon & Hamp'sr	173	5,000,000.00					
498,800	6			1860-2	2d	.....	Androscog'n & Kennebec	54.53	1,400,000.00			209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange..	86.5	1,000,000.00	129,000.00	272,123.74	173,780.74	8 pr. ct.	4 pr. ct. 6m
52,646	0			now	"	.....	B'ng'r, Old T. & Milford..	12.5	135,000.00	52,646.26	39,104.40	2,671.61	15,000 in '53	
500,000	7		N. Y.	1866	1st mortgage.	.....	Boston & Worcester..	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m	5 pr. ct. 6m.
200,000	7			1857-9-62	Income.	.....	Buffalo & State Line..	.....	1,300,000.00					
577,197	6			1864	Domestic.	.....	" " "	.....						
192,200	7			1872	4th mortgage.	.....	Central Ohio..	30						
380,000	7			1874	1st mortgage.	.....	Champ'n & St. Lawrence	43	1,872,800.00	1,001,087.00	168,200.00	77,700.00	10 per ct.	
1,440,000	7			1864-7	Domestic.	.....	Ch'r'l'te & South Carolina.	110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,200	
1,300,000	6-7-8		N. Y.	1868-9	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m	
374,000	8			1868-76	2d	.....	" " "	.....						
1,300,000					Convertible.	.....	" " "	.....						
532,000					1st mortgage.	.....	Chicago, Fulton & Iowa..	5						
104,000					2d	.....	Cin. Will'ng'n & Zanes'ville	25	1,761,149.16	2,241,500.00	221,491.96			
305,500					3d	.....	" " "	.....						
540,000	6				Income.	.....	" " "	.....						
43,000					Convertible.	.....	Cleveland Col. & Cin.	103 3/4	4,741,220		1 3,754	700,804	6 per cent.	
400,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning..	85	1,500,000.00					
000,000	7			1873	2d	.....	" " "	.....						
500,000	6			1857-8-9	1st mortgage.	.....	Cumberland Valley.....	52	1,218,300.00		160,511.56	81,101.56	\$23,250.24	
350,000					1st	.....	Dayton & Cin. short line.	52	1,000,000.00	1,000,000.00				
740,000	7				1st mortgage.	.....	Eastern Railroad..	93 6-10	3,345,000.00		665,578.79	228,077.84	\$224,133	
88,000	10			1869	1st	.....	East Ten. & Virginia..	130	625,450.00		30,897.30	19,692.30		
400,000	10			1861	2d	.....	Essex Railroad..	20	700,000.00					
200,000	10			1864	1st mortgage.	.....	Evansville & Crawf'd'vle	109	2,228,657.50		243,970.42	136,061.90	\$133,221.45	
100,000	6				1st	.....	The Fitchburg (Mass.) R.R.	.....	3,540,000.00		681,162.52	213,837.81	3 per cent.	
100,000	6				2d	.....	Fox River Valley..	33	800,000.00					
300,000	7				1st mortgage.	.....	Fair Haven Branch..	15	300,000.00		50,381.23	14,822.45	\$166,240.00	
4,000,000	6 1-9			1858	1st	.....	Georgia R.R. & Banking Co.	233	4,156,000.00		27,376.69	14,207.07		
2,000,000	7			1869-70	1st	.....	G't West'n R.R. of Can.	281 1/4	4,101,550.00		2,068,836.00	357,689.42	\$166,240.00	
1,812,000	7			1860	2d	.....	Housatonic Railroad..	74	2,000,000.00		339,196.50	176,529.95		
12,885,000	7			1875	3d mortgage.	.....	Hudson River..	24 1/2	4,000,000.00		1,924,382.44	718,037.40		
4,115,000	6			1875	1st	.....	" " "	144	4,000,000.00					
3,000,000	7			1876	2d	.....	Illinois Central R.R.	138 1/2	18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.	
600,000	7			1860	1st	.....	" " "	701	3,558,376.00					
700,000	7	Nov. 1			2d	.....	Indiana Central.....	72 4			354,871.00			3 pr. ct.
50,000	7	Jan. & July 1			1st	.....	" " "	.....						
700,000	7			1862	1st mortgage.	.....	Iron R.R.	13	123,700.00					
					2d	.....	Kentucky Cen. 2d Div..	.....	719,500.00					
218,000	7				1st	.....	Knuxville & Kentucky..	.....						
1,000,000	7			1866	2d	.....	Laurens (S. C.) R.R.	32	166,000.00		22,233.59	14,233.59	\$8,000	
1,000,000	7			1875	2d	.....	Louisville & Nashville..	184			50,234.71	14,149.13	10 pr. ct	
2,000,000	6				1st	.....	Lowell & Lawrence..	12 35	300,000.00		587,236.57	162,277.50		
2,500,000	7				1st	.....	Mad River & Lake Erie..	.....	2,697,090.00					
2,000,000	7			1868	1st	.....	" " "	.....	2,697,090.00					
60,000	7 and 8			1874	2d	.....	Manchester & Lawrence..	26	1,000,000.00				\$24,000	
420,000	8			1867	1st	.....	Marietta & Cincinnati..	18 1/2						
329,000	8				1st mortgage.	.....	" " "	.....						
320,000	8			1881	1st	.....	Mexican Gulf R.R.	27						
6,000,000	6			1-68	2d	.....	Milwaukee & Horicon..	30						
				1884	1st	.....	Mineral Point R.R.	32						
					2d	.....	" " "	.....						
500,000	7			1869	1st mortgage.	.....	Mobile & Ohio..	497	10,000,000.00		233,498.96	162,802.24	7 pr. ct.	
2,356,000	7	May & Nov.	N. York		1st	.....	Nashua & Lowell R.R.	15	600,000.00		191,752.42	55,501.74	2 pr. ct. 6m	
8,892,600	6	June & Dec.	N. York	1864	Con. till 1859.	86 3/4	New Haven & North'm'tn	55	922,500.00		14,763,897	7,707,348	3 pr. ct. 6m	
3,000,000	7			1873	1st mortgage.	79	New York Central.....	86 1/2	23,067,400					
936,000	7			1864	2d	.....	" " "	.....						
411,700	6			1863	1st	.....	N. Y. & Harlem R.R.	15 1/2	6,717,100.00		1,040,393.26	64,678.71	\$37,692.30	
500,000	7				1st	.....	" " "	.....						
300,000	6				2d	.....	N. Y., Prov. & Boston..	50	1,58,000.00		245,713.00	51,544.40		
					1st	.....	N. Lon., Willim'tu & Pal.	66	1,700,000.00		120,571.50			
					2d	.....	" " "	.....						
1,500,000	6			1873	1st mortgage.	.....	Pontchartrain R.R.	5	600,000.00					
1,000,000	6			1873	2d	.....	N. O., Opelousa & Gr't West.	62 1/2	6,000,000.00		116,795.00	366,119.80	7 pr. ct.	
2,000,000	6			1885	3d	.....	N. Y. & New Haven..	103 1/2	3,000,000.00		1,007,666.48			
1,500,000	7			1859	1st mortgage.	.....	North Western Va. R.R.	.....						
3,000,000	7				1st mortgage.	.....	" " "	.....						
419,300	5			1877	1st mortg	.....	Northern (N. Y.) R.R.	118	2,000,000.00		600,000.00	88,458.56	2 1/2 pr. ct.	
221,800	6			1860	1st mortgage.	.....	North Missouri R.R.	19 2			25,176.74			
					1st	.....	Norwich & Worcester RR	60	2,111,500.00		304,236.33			
					2d	.....	" " "	.....						
400,000	6			1866	1st mortgage.	.....	Ogd'sb'g, Clay't'n & Rome	94			229,690.10	137,875.93	5 pr. ct.	
1,200,000	7			1875	2d mortgage.	.....	Ontario, Simcoe & Huron	88 3	2,957,500.00		276,539.02			
300,000	8			1873	1st mortgage.	.....	Orange & Alexandria R.R.	.....						
300,000	6				1st	.....	" " "	.....						
350,000	6				1st	.....	Peoria & Bureau Val. R.R.	47	1,500,000.00					
800,000	7			1861	1st mortgage.	.....	Philadelphia & Trenton..	28 1-5	1,000,000.00					
1,260,000	6			1864 to 1874	1st	.....	Portsmouth & Concord..	47						
				20 years.	1st mortgage.	.....	Potsdam & Watertown..	76	2,000,000.00					
					1st mortgage.	.....	Rutland & Washington..	62 1/2	950,000.00		68,525.42			
					1st mortgage.	.....	St. Louis & Iron Moun. R.R.	86	6,000,000.00					
					1st	.....	Salem & St. Louis R.R.	16 8 3/4	400,000.00					
					2d	.....	Sud'sky, Mans'd & Newk	116						
					1st	.....	Sullivan Railroad..	26	500,000.00		75,246.06			
					1st mortgage.	.....	Tennessee & Alabama..	145			39,586.44			
				1861	1st mortgage.	.....	Terre Haute & Richmond	73	1,294,450.00					
				1840	2d	.....	Toledo, Wabash & Western	242						
				1875	3d	.....	Troy & Boston.....	.....	1,000,000.00					
					1st, 2d, 3d	.....	" " "	.....						
					1st mortgage.	.....	Vicksburg & Jackson..	46						
					2d	.....	Virginia & Tennessee..	215	3,000,000.00		322,048.60			
					3d	.....	Westchester (Pa.) R.R.	31	165,000.00					
					1st mortgage.	.....	Wilmington & Manchester	171						
					2d	.....	" " "	.....						
					1st mortgage.	.....	Winchester & Potomac..	32						
					2d	.....	Worcester & Nashua..	45 69						



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

May 8th, 1857.

Belvidere, Del. guar. 1st mort. conv. ....	@	88
Chicago & Rock Island, Mort. conv. 1858.	"	"
Cin. Ham & Dayton, 2d mort. ....	"	80
Detroit & Milwaukee, 1st mort. conv. till 1865.	64	66
Erie, 3d Mortgage, 1883.	82	84
" Sinking Fund.	81	83
" conv. 1862.	73	75
Grand Trunk (Canada) Dehture.	90	91
Great Western " conv.	116	121
" " non-conv.	105	107
Illinois Central, 1st Mort., 7's.	90	91
" " with option 70 per cent. shares till Jan. 1858.	106	108
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent.	86	88
Little Miami 1st Mort. not conv. 6's.	"	"
Marietta and Cincinnati, 1st Mort.	"	"
Michigan Central, conv. 8's, 1860.	90½	91½
do do do 1869.	90	91
N. York Cent. Not Mort. Not conv. 6's 78	"	80
" " conv. 7's.	92	94
Ohio and Mississippi, 1st Mort.	"	"
Ohio and Pennsylvania, Income 1872.	68	70
Panama. No mort. conv. 1860.	"	"
Pennsylvania, 1st Mort. conv.	88	89
" " Sterling, 2d Mort.	91	93
Stenbenville and Ind., 2d Mort.	"	"

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending May 20, 1857.

BONDS.

\$8,000 Covington & Lex. R. R. Co. 7 per cent. 2d mort. Bonds.	65
2,000 Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds.	80
5,000 City of Cincinnati 6 per cent. Bonds	85
1,000 Hillsboro' & Cincinnati R. R. Co., 7 per cent. 1st Mortgage Bonds.	55
2,000 Columbus and Xenia R. R. Co. 7 per cent. Div. Bonds, June coupon off, 1860.	88
3,000 Covington & Lex. R. R. Co., 6 per cent. Bonds, guaranteed by the city of Covington.	60
1,000 Indianapolis & Cincinnati R. R. 7 per cent. 2d Mortgage Bonds.	80
1,000 Cincinnati & Whitewater Canal Bonds, including 11 years' int.	10
762 50 Little Miami R. R. Co. Dividend Scrip.	82

STOCKS.

250 Shares Ohio & Miss.	11½
100 " do do	11½
200 " do do 60ds.	12½
150 " Marietta and Cin.	18½ and int.
144 " Cov. & Lexington.	18
70 " Little Miami.	95
61 " Columbus & Xenia.	93½
50 " Cin., Ham. & Dayton.	67½
10 " do do	68
100 " Junction (Ind.).	8
25 " Eaton & Hamilton.	18
40 " Indianap. & Cin.	63
20 " Cincinnati Ins. Co.	90
10 " Farmers' Bank Ky.	120

## MONETARY AND COMMERCIAL.

Since our last there has been a decrease in the pressure in the markets for money. The wants of the merchants are not as great, and hence they are better accommodated with the limited supply of capital at the command of the discount houses. We quote the regular rates at 9 to 12 per cent. Outside rates range from 15 to 21 per cent., according to the character of the paper and the necessities of the borrower. The late abundant rains and the luxuriant vegetation give good promise of a prosperous year.

The approaching celebration of the opening of the Ohio & Mississippi R. R. from Cincinnati to St. Louis will be one of the grandest affairs ever known in our country. It is got up on a scale of magnitude commensurate with the importance of the great work, the completion of which is to be celebrated. The joint celebration of the opening of the two last links which shall unite the Atlantic with the Mississippi through the Central Valley of our country, and its richest agricultural

region, is one of no small significance. Over thirty railroads, in all parts of the country, have engaged to honor the tickets of these two roads, and convey free the invited guests to this great feast.

In a commercial point of view this is a great event for Cincinnati. It completes the great chain of roads which unite her with the East and West, and restores her to that position of commercial importance in which her river facilities, in the absence of railroads, had placed her.

Stocks are dull, owing to the absence of floating capital and the disposition to invest in lands. Ohio & Mississippi stock is somewhat sought for at present rates, in expectation of a rise. Little Miami has sold during the week at 95. Covington & Lexington R. R. Second Mortgage Bonds have declined to 65. The long delay in the appearance of the annual report of this company, due some months ago, has probably something to do with the present decline. The officers of our roads should know, if they do not, that there is nothing gained by secrecy in the affairs of a corporation. Wherever there is mystery there is distrust; and the worst certainty is better than the slightest distrust. We would, therefore, say to the company, bring forth the report. It was understood to have been in the hands of the printer some weeks ago; it should have been out before now.

At the East we notice considerable activity in stocks. The favorite foothill in the New York market seems to be the Michigan Southern, of which we give the report entire in our reading columns. On May 20 the Directors presented the result of the applications for \$3,000,000 of 10 per cent. guaranteed stock. The gross applications reached \$6,645,088, and represented about \$7,050,000 of the general stock of the company. The Directors awarded four shares of the guaranteed stock of the company for every 10 shares of the general stock held by the applicants.

We subjoin our usual quotations from Hewson & Holmes:

During the past week, although money has been easier, there has been fewer transactions in stocks than in the previous week. For Ohio & Mississippi shares the demand has increased, and we may look for a decided advance in this stock. The number of passengers over this road is every day becoming more numerous, and the predictions of its most sanguine friends, as to its full and complete success, is now, we think, in a fair way of being realized. We notice sales of Little Miami shares at 95. Other leading stocks have varied but little from last week's rates.

Covington & Lexington second mortgage bonds have been sold as low as 65; but this we look upon as a temporary decline, caused by the hurried nature of the sale. They are ranked among our best securities, and ought to command a much higher figure.

Exchange on New York continues firm, at  $\frac{3}{4}$  to 1 per cent., and on New Orleans  $\frac{1}{4}$  discount to  $\frac{1}{2}$  premium.

## SALES AT THE NEW YORK STOCK BOARD—May 20.

\$11,000 Virginia 6's.	91½
30,000 Missouri State 6's.	82½
5,000 California State 7's, 1870.	57
2,000 Erie Railroad Bonds, 1875.	88
1,000 N. Y. Central 7's.	100½
6,000 Harlem R. R. 2d mort. Bonds.	72½
2,000 Illinois Central R. R. Bonds.	99½
1,000 Terre Haute and Alton 2d mort. Bonds.	68
50 shares Pacific Mail St. Co.	65
10 " Cleve., Col. & Cin.	103½
800 " New York Central.	86½
912 " Erie.	36½
800 " Harlem R. R. stock.	12
300 " Reading.	78½
750 " Mich. S. & N. Ind.	60½
100 " do sc. stock.	92
50 " do p. do.	92
50 " Panama.	93
250 " Illinois Central.	138½
200 " Cleveland & Pittsburgh.	46½
10 " Galeua & Chicago.	97½
200 " Cleveland & Toledo.	65½

400 " Chicago & Rock Island.	97
55 " Milwaukee & Miss.	67
60 " LaCrosse & Milwaukee.	78
30 " C. B. & Quincy.	95
10 " Hudson River.	24

The gross receipts of the Catawissa Railroad for the month of April, notwithstanding the severe snow storm, which interrupted its travel, &c., for two days, amounted to.....\$37,228 79

Due connecting roads..... 8,082 81

Net receipts.....\$29,245 98

Same time last year... 22,468 75

Increase (30 per cent.).....\$6,777 23

The subscriptions to the guaranteed stock of the Southern Michigan Road, made by stockholders, was something in excess of the amount to be awarded—consequently those subscribers who were not stockholders fail to get any new stock. The aggregate amount applied for was \$6,645,088, being 902 different subscriptions. The award is forty new shares on the hundred of old stock.

## BREVITIES.

—WISCONSIN RIVER R. R.—The following gentlemen are the newly elected officers of this road: Moses M. Strong, Wm. H. Lander, Wm. E. Smith, J. W. Davis, Stoddard Judd, Benjamin Ferguson, Wm. J. Dawes, Q. H. Barron, Samuel McLaughlin, John Parker, Miner Porter.

The following officers were chosen:

President.—Wm. E. Smith.

Secretary.—Wm. J. Dawes.

Treasurer.—J. W. Davis.

Attorney.—Wm. H. Lander.

—HANNIBAL AND NAPLES R. R., Mo.—To-day the citizens of Hannibal are to decide by vote whether they will subscribe one hundred thousand dollars to the stock of this road.

—SCIOTO AND HOCKING VALLEY R. R.—The following are the officers of this Company:

E. A. Spencer, *President*.

J. P. Terry, *Vice-President*.

G. A. Waller, *Treasurer*.

J. W. Collins, *Secretary*.

Peter Pickerel, of Jackson, elected to fill vacancy occasioned by declination of C. A. M. Damarin, and W. J. Richart, of Perry, to fill vacancy by failure to elect.

—COLUMBUS AND HOCKING VALLEY R. R.—We learn from the Athens papers that there is a probability of an early revival of this road.

## ALABAMA AND FLORIDA RAILROAD.

The following letter from the President of the road will show the condition of the work:

The whole line up to the Alabama State line, might be in readiness to receive the superstructure, and complete it, this time next year. He thinks the sooner we procure the rails, the better. That if we had the rails now, the track laying could proceed without interruption, the whole distance to the line. The contractors are now working and completing that portion of the earth-work and masonry, where the heaviest labor is to be found—being within the 19th and 26th miles.



Within this distance the descent from the ridge, dividing the waters of the Escambia from those of the Perdido, to the valley of the former is effected. The line of road continues in the valley for some distance into the State of Alabama. Most of the masonry on this part of the line has been completed. The contractors have been fortunate in finding an abundance of stone of good quality for the construction of culverts. No bridge work will be required until we arrive at the 28th mile, near the middle of which the line crosses Pine Barren Creek, a stream of considerable size, requiring ample water-way for the discharge of its floods. It will be necessary to construct, over this creek and adjacent low grounds, 800 feet of trestle work. After crossing this creek, the country is slightly broken, being traversed by numerous small branches, all of which will be crossed by culverts made of stone—which material is found in the vicinity. From this point to the State line, Mitchell's and Escambia creeks require to be crossed with trestle-work, at the former on a distance of 250 feet, and at the latter on a distance of 800 feet. For the small intermediate branches, stone may be found for the necessary culverts. The grading from the 26th mile to the State line is comparatively light, and can be done in a short time.

The total length of road, inclusive of turns-out at depot will be 46 miles 3676 feet, which with a rail of 51 lbs to the yard, will require 3742 tons of iron.

It will be necessary to build a wharf in time to receive the iron.

As soon as the track-laying is commenced, one locomotive and four platform cars will be required to have the iron along the road.

It will not be necessary to have the workshops constructed until a large part of the road is in readiness to do business.

WM. H. CHASE,  
Pres't Ala. & Fla. R. R. Co., of Fla.

[Continued from page 215.]

And there would be of the 10 per cent. guaranteed stock..... 3,000,000 00

Making a total stock of.....\$10,000,000 00  
The bills payable, including contracts on time for rails and locomotives, are.....\$2,275,099 45  
And other loans..... 161,400 00

Total.....\$2,440,499 45  
The cash payments on the proposed stock issue would amount to..... 1,500,000 00

Thus reducing the floating debt to.....\$940,000 45  
And the company would be left in possession of its general assets, as shown in the statement, besides about \$250,000 of Sinking Fund Bonds, and about \$900,000 of the Detroit, Monroe & Toledo Bonds unsold.

It is believed that these assets and securities could then be converted as fast as would be necessary to meet the wants of the company.

The Board, therefore, consider that the sale of this guaranteed stock, upon the terms of payment proposed, will provide all the means necessary to place the finances of the company in a perfectly sound condition.

And it will be seen that it proposes to do this without any sacrifice to the company. For whatever may be the present price of our shares, depressed at the moment to an unjustifiable degree by accidental and entirely temporary causes, they are worth par to the company. The company has received nearly par for the total amount of its stock now outstanding, and it has heretofore paid, and expects for the future to pay, liberal dividends upon its par value. It is, therefore, entirely proper for the Board to

agree to receive it at par in part payment of the stock proposed to be issued.

While by this means we propose to provide the sum of \$4,500,000 in cash without sacrifice, it will not be forgotten that the ordinary mode of raising new means by the creation of bonded debts, and by the sale of the securities at the customary discount, would involve a very large sacrifice in providing that sum of money. We do not consider that the exigencies of the case warrant this course, or that the stockholders of this company would justify it.

By far the greatest part of the stockholders have been interested in the company for years; and, so far as the books of the company furnish evidence, they hold the stock as an investment.

They look, therefore, to its capacity to pay permanently liberal dividends, and they would avoid, as the Board desires to do, any unnecessary additions to cost. Amongst the 1,278 names which compose our share lists, we find an array of wealth and strength which satisfies us that the stockholders are abundantly able to make the advances which are necessary to protect their own property from unnecessary sacrifices.

For these reasons we have adopted the plan which we now present to the stockholders, and by which we offer to them in preference the right to take, *pro rata*, the 10 per cent. guaranteed stock which we have resolved to issue.

If, however, for any reason, any of the stockholders are not prepared to take the proportion of such stock to which they are entitled, we shall dispose of it on the same terms of payment to other stockholders or other parties.

We do not doubt that a stock of this company to the extent of \$3,000,000, upon which the payment of 10 per cent. dividends per annum is guaranteed (with a right to a *pro rata* share of all dividends over 10 per cent. per annum), will be eagerly sought for and taken. The company has paid over 13 per cent. per annum upon the average upon its entire amount of stock, since the opening of the line to Chicago, and, with its new lines which are just being completed, and upon the eve of being brought into full operation, it cannot be reasonably doubted that its gross earnings will be very considerably increased. A guaranteed stock, therefore, of this limited amount, payable in the manner stated, and securing such liberal returns, must be regarded as one of the most desirable investments within the reach of capitalists.

Books of subscription for the \$3,000,000 of guaranteed stock are opened at the office of the company at New York, and stockholders and others who desire to subscribe are requested to do so in person or by letter, prior to the 20th day of May instant.

By order of the Board,  
EDWIN C. LITCHFIELD, President.  
New York, May 6, 1857.

GENERAL STATEMENT, MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD CO., MAY 1, 1857.

Construction, including Jackson and Goshen Branches and Erie & Kalamazoo Railroad.....\$12,559,443 84  
Equipment..... 1,598,881 21  
Detroit, Monroe & Toledo R. R..... 565,718 49  
Steamboats..... 482,165 53  
Propellers..... 51,419 60

Total.....\$15,257,628 68  
Materials on hand, wood and iron..... 120,959 81  
In store and shops..... 125,247 71

Stocks owned by the company:

Detroit, Monroe & Toledo Railroad and Michigan Southern & Indiana Railroad. Stocks of other companies..... 347,913 83  
Bonds owned by the company..... 356,300 00  
Bonds and mortgages..... 48,214 29  
Bills receivable..... 315,030 40  
Due from Superintendent and Agents, on unadjusted running accounts, and cash in hands of Cashier on line of road..... 450,642 29  
Sundry balances of account due company..... 163,956 15  
Cash in bank at New York..... 134,146 43

Total.....\$17,705,070 33

Capital stock:

General stock.....\$ 8,329,100 00  
Construction stock..... 131,000 00

Bonds:

Incomes, 1857..... 10,000 00  
Michigan Southern, 1860..... 993,000 00  
Northern Indiana, 1861..... 984,000 00  
Erie & Kalamazoo, 1862..... 300,000 00  
Michigan Southern, 1863..... 352,000 00  
Northern Indiana, 1863..... 259,000 00  
Jackson Branch, 1865..... 222,000 00  
Goshen Branch, 1868..... 1,372,000 00  
Sinking Fund, 1885..... 2,226,000 30

Total.....\$6,799,000 00

Less bonds purchased and held by Commissioners of Sinking Fund..... 143,000 00

6,656,000 00

Bills Payable—including

Contracts for iron maturing in 1858, and for cars and locomotives..... 2,279,099 45  
Other loans..... 161,400 00  
Due Commissioners of Sinking Fund..... 1,014 04  
Detroit, Monroe & Toledo R. R. Bonds, guaranteed by this company, due 1876, payments on account of..... 101,566 00  
Dividends and interest on stock uncalled for..... 12,593 33  
Interest on bonds uncalled for..... 8,050 00  
Due by company to sundry persons..... 1,144 77  
Income account..... 23,102 69

Total.....\$17,705,070 33

J. M. HOPKINS, Secretary.

The subscribers, a Committee appointed by the Board of Directors of the Michigan Southern & Northern Indiana Railroad Company, hereby certify that they have examined the assets of the company, as set forth in the above general account, and find the same correct, and in the possession of the company.

JNO. A. C. GRAY,  
J. H. RANSOM,  
W. B. WELLES, } Committee.

New York, May 5, 1857.

The subscribers, a Committee of the Board of Directors of the Michigan Southern & Northern Indiana Railroad Company, hereby certify that they have carefully examined the bond accounts of the company upon the books, and also the bonds which have been returned and cancelled, and that the bonds issued by the company appear to be each duly entered on the books and accounted for, or remaining in the hands of the Treasurer, and that the bond accounts appear to be correct.

W. B. WELLES,  
HENRY KEEP,  
E. MORRISON, } Committee.

New York, May 5, 1857.

The subscribers, a Committee of the Board of Directors of the Michigan Southern & Northern Indiana Railroad Company, hereby certify that they have carefully examined the stock accounts of the company and the accounts of the individual stockholders, and that they find the aggregate of shares standing to the credit of individuals corresponds with the balance of the stock account on the general ledger, and that the accounts appear to be correct.

HENRY KEEP,  
W. M. VERMILY, } Committee.  
W. B. WELLES,

New York, May 5, 1857.

J. T. CRAPSEY,  
ATTORNEY AT LAW,  
OFFICE:  
N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

G. W. MORRILL. G. B. BOWERS.  
MORRILL & BOWERS,

(Successors to and members of the late firm of C. W. SON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr. Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

ap16



# GENERAL RAILWAY SUPPLY AGENCY.

**SNOOK & HILL'S PATENT**

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

## RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**

**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

## BUSH & LOBDELL

Wilmington - - - - - Delaware.

MANUFACTURERS OF

**CHILLED WHEELS**

AND

## TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

**CELEBRATED WHEELS,**

EITHER SINGLE OR DOUBLE PLATE,

WITH OR WITHOUT AXLES.

**WHEELS FITTED**

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

**Most Reasonable Terms.**

ap23

**TO PRINTERS.**

**Large Cylinder Hoe Press  
FOR SALE.**

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,500 if application is made at once.

Address **WRIGHTSON & CO.,**  
167 Walnut street, Cin'ti, Ohio.

N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.  
ap8-1m **W. & CO.**

## W. G. HYNDMAN'S



## Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address **W. G. HYNDMAN,**  
ap23 41 East Second street, Cincinnati, O.

## Railroad Iron.

**2000 TONS** RAILS, Erie pattern, weighing about 56 lbs. per yard, in port and to arrive; for sale in lots to suit purchasers, by

**M. K. JESUP & CO.,**  
44 Exchange Place, New York.

## FOR SALE.

**TWO HOUSES** nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

**WRIGHTSON & CO.,**  
167 Walnut street, Cin'ti, Ohio.

## SILVER, GOLD, LEAD,

And Other Minerals,

ON THE PROPERTY OF THE  
**Sonora Exploring and Mining Co.,**

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the Sonora Exploring and Mining Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matters so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

**EDGAR CONKLING, Ag't for the Company,**  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

## Norris' Locomotive Works.



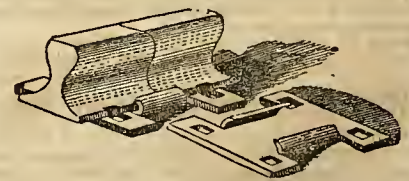
PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. **RICHARD NORRIS & SON.**

## RAILROAD SPIKES.



WROUGHT IRON

## Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, **HOOK & FLATHEAD R. R. SPIKES**, of all Patterns, **WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.**

The best quality of refined iron is used, and all orders filled with dispatch. **J. HOPKINSON SMITH**  
No. 25, South Charles

Please direct the name in full.  
Baltimore August 31st



## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Sup't.  
Racine, May 15, 1857.

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Is engraving in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR S&W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all proposals made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
a1 r2 Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns,

Brass, Bronze, and Silvered Car Side Lamps and Candlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks, CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED.

## E. MENDENHALL,

## MAP, BOOK & PRINT SELLER,

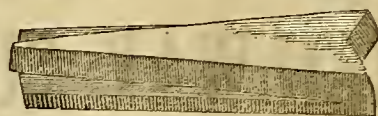
Has constantly on hand  
GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,  
Geological and Astronomical Charts, Globes,  
MICROSCOPES, TELESCOPES  
DRAWING INSTRUMENTS, &c.

Publisher of the  
Railway Map of the Western States,  
In Sheet or in Pocket Case;  
THE LARGE SECTIONAL AND RAILWAY MAP OF OHIO  
THE LARGE MAPS OF CINCINNATI, and HAMILTON CO.  
OHIO, and the TOWNSHIP MAPS OF INDIANA and IOWA  
MAPS OF EVERY DESCRIPTION.

mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention.

LEE & LEAVITT,  
15 Walnut st., Cin'ti.  
N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, & Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for  
ASHCROFT'S STEAM GAUGE, ALLEN AND NOT E METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

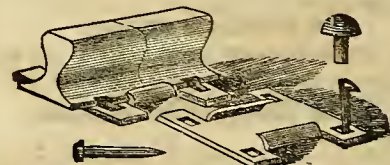
CHAS. W. COPELAND,  
Consulting Engineer,  
64 Broadway, N. Y.

## W. G. ATKINSON, Civil Engineer, Surveyor & Draftsman,

CUMBERLAND, MD.  
RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.

## GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.

feb 28

CORBY, GOSSIN & CO.



## Most Direct Route to the East.

# BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.  
FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

RIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent.

July 10 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.

### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

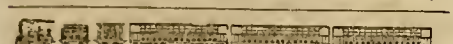
#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK, Sup't Terre Haute & Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducting. Sold at wholesale at great discount from list prices.

cc23-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

#### TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

#### FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus. One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

#### FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

Freight—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call for orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L Office No. 2 Burnet House.

Jan 2

1856.

1857. Spring Arrangement. 1857

## Cincinnati, Hamilton & Dayton [TRUNK LINE.] RAILROAD.

FOR THE NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

#### FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

#### SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

LAKE SHORE TRAIN, For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

#### "STEAMER BAY CITY,"

at 6:30 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

#### THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

#### FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:30 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburgh Philadelphia, &c. Same train connects Sandusky for Cleveland, New York, Boston, &c.

#### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

#### RETURNING TRAINS

Leave Hamilton at 7:15 and 9:50 A. M., 12:05 M. and 6:50 P. M.

Leave Dayton at 5:50 and 8:50 A. M., and 5:30 P. M.

For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnbuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU & INDIANAPOLIS R. R.

Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Toledo Road for Lago, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Fr'ght. Ag't.

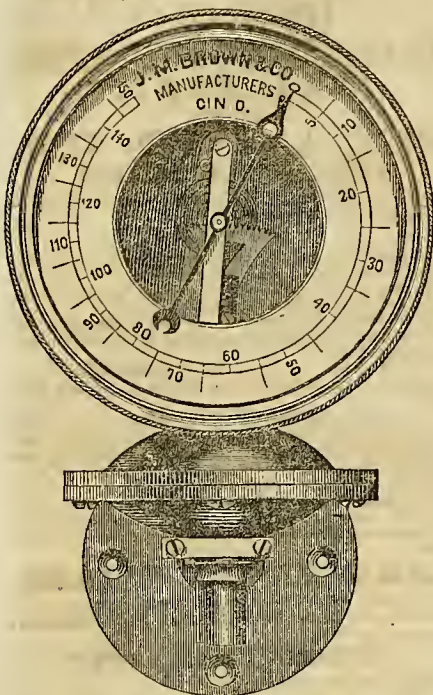
Indianapolis, Sept. 16, 1856.

[mh29-1y.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

### FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

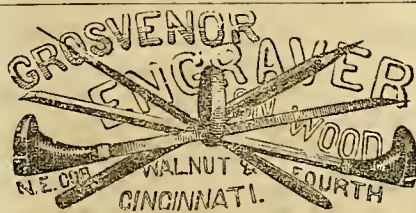
Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,

250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

### DRILL THE TUBE-PLATES

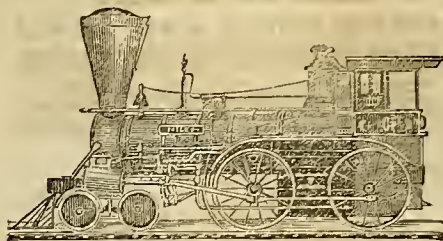
and to set the tubes in the best manner. Tube Cleaners, Steel Wire and Whalebone Brushes. Tubes for Artisan wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmiths' Tuggers.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,

82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI.  
BUILT to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.

New York, Ap 3, 1855. 9 South William Street.

### A. B. LATTAS

## Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

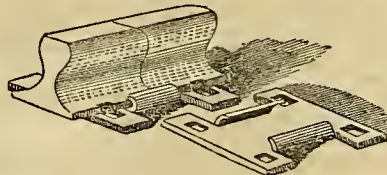
ap17

A. B. & E. LATTAS.

J. D. GREEN.

C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

Feb. 14 1y.

J. B. GREEN & BRO.

## THE SCHENCK MACHINERY DEPOT

AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

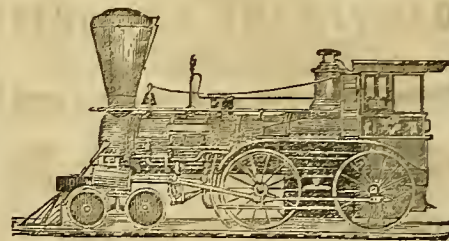
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue Paints, Varnish and Glue Brushes. Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.  
†oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



terns, Stationary Fire Engines, Garden Engines and all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

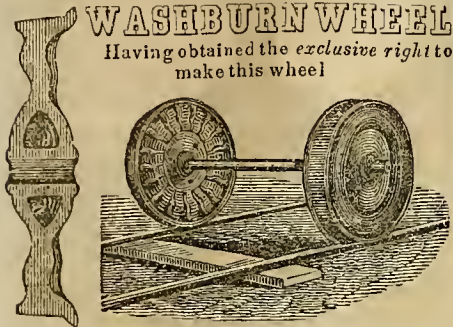
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps at a Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Levor Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern; and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



**DOUGLASS, SMITH & CO.**

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

## CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

## WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

## BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL

## DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,  
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

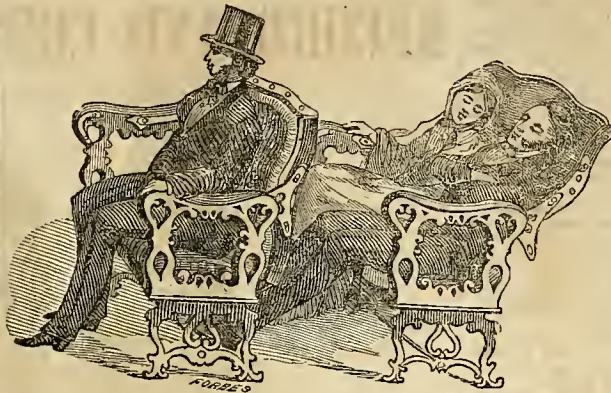
Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16<sup>th</sup> \* **JOSEPH DAVENPORT.**

## S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n24 NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855.**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

## ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
**LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS.**  
190 Water Street New York.

## RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July 31

## THOMAS D. STETSON, Mechanical Engineer,

AND  
**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.  
Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the 5<sup>th</sup> and Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

aug14-ly **P. DUDLEY,** President of the Board.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** feb19-1m 9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** no13 10 Wall at., near Broadway, New York.

## IRON BOILER FLUES, PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1 1/2 to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

**Warehouse, 85 South Third St.,**  
PHILADELPHIA. Aug

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb 7, '56-2m.] **A. H. GOODMAN & CO.,** No. 7 Wall st., N.

## RAILROAD CAR AND

## COACH TRIMMINGS.

## DOREMUS & NIXON,

No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**

## IMPORTERS

OF

**Plain and Figured Mohair Plush,**  
Printed & Unent do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Emameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width.**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Unent Hair, in Rope or Picked;

## PATENT FELT.

**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in hand for exportation. sep18 **DOREMUS & NIXON**

## RAILROAD RECORD, BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.  
JAMES A. DOORMAN. EDWIN A. POST.

**RHINELANDER, DOORMAN & CO.,  
RAILWAY AGENTS  
AND**

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Doorman, Esq., Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-1y

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-1f 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 23d street, N. Y.

**T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.**

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR  
**RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened, the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGWAY & BROTHERS,  
dec. 1: No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-1y 119 Walnut st., Odd Fellows' Building

**The Great Arnold Secret Discovered at Last**

**BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**



Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**—For Ledgers and Records only. **WRITING**—For Books, Letters, and General purposes. **COPYING**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

*Transportation Office, Cincinnati, Hamilton & Dayton Railroad.*  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel anything of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana; and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,  
—AND—**

**Blank Book Manufacturers,**

NO. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,  
Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap:3

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.  
aps OSUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 225 H Street, Washington, D. C.

ap:12

**Thorough Bred Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JUNE 4, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 15.

#### EDITORIAL.

Buffalo, Corning & New York R. R. ....	225
The Opening of the Great Ohio Valley Line .....	225
Railroad Celebration .....	226
Liquifying Quartz .....	227
The Canadian Investigation .....	227
On the Pacific R. R. ....	227
Sonora Exploring and Mining Co. ....	229

#### MISCELLANEOUS.

New Motive Power—Electro-Magnetism .....	230
London to Lahore .....	230
Law Relative to Railroad Bonds .....	233
Earnings .....	229
New R. R. Bridge at Peoria .....	229
Inventors' Manual .....	234

#### MONEY AND STOCKS.

Table of Stocks and Bonds .....	232
London Quotations .....	233
Cincinnati Stock Sales .....	233
Monetary and Commercial .....	233
Salts at the New York Stock Board .....	233

**NORMAN HOUSE AND PARK.**—Persons feeling an interest in parks should examine “the PLAN and PROSPECTS of the NORMAN COMPANY.”

Pamphlets just issued, of superior typography, and containing a most beautiful chromolithographic picture, are for gratuitous distribution at the office of J. T. CRAFTSEY, Esq., Northwest corner of Walnut and Sixth streets, Room No. 14 Bacon's Building.

—BUFFALO, CORNING & NEW YORK R. R.  
—The Buffalo, Corning & New York Railroad, extending from Buffalo to Corning, a distance of 135 miles, was sold at Corning on the 14th inst., to John A. Stevens and John A. C. Gray, Trustees, for and on behalf of the first bondholders, for \$800,000. The sale of the rolling stock was continued on Friday and Saturday, realizing about \$75,000.

The receiver of the company will continue to operate the road until a new organization is effected, which will be prior to the first of August next, when the name of the company and road will probably be changed.

VOL. 5.—NO. 15.

### THE OPENING OF THE GREAT OHIO VALLEY LINE.

This is the week of the Ohio Valley Railroad celebration. The celebration commemorates the opening of the entire line of railroad from the city of St. Louis, *via*. Vincennes, Ind., Cincinnati, Marietta, O., Parkersburg, Va., Cumberland, Md., to the city of Baltimore, on the Potomac. It is the most central, and the most direct line of railroad which is or can be made between the Atlantic and the Mississippi. We call it the OHIO VALLEY LINE, because from the summit of the Allegheny Mountains to St. Louis it lies in the valley of the Ohio, and sufficiently near the river to answer all the practical purposes of a valley road. It crosses the Ohio at Marietta, is a tangent to it at Cincinnati, and between Cincinnati and St. Louis has *radii* to it at five different points, viz: at Madison (by the *Madison & Indianapolis Road*), at Louisville (by the *Jeffersonville Road*), at Evansville (by the *Evansville & Terre Haute line*), at New Albany (by the *New Albany & Salem Road*), and at Cairo (by the *Illinois Central*.) Thus, for a distance of 650 miles, this great line is emphatically an Ohio Valley Road. In that aspect of the case it derives a double importance and value; for it must be obvious to all intelligent minds that the Ohio river is really the great origin and generator of all the commercial business on the 200,000 square miles which constitute the area drained by that river—enough for five large States, and which is in fact occupied by five States, mainly, viz: Ohio, Indiana, Illinois, Kentucky and Tennessee. The portions of these which are not included in the valley are more than made up by Western Virginia. Of this Ohio Valley Line, the present celebration is really to mark the opening of the *Ohio & Mississippi*, the *Cincinnati & Marietta*, and the *North-Western Roads*; but, to give a fair view, we will describe the whole line.

1. OF THE BALTIMORE & OHIO R. R.—Of the 920 miles from Baltimore to St. Louis, 200 miles are of the *Baltimore & Ohio Road*. This road properly goes from Baltimore to Wheeling, 380 miles; but, in order to make a direct road to Cincinnati, the North-Western was chartered and made from Grafton to the Baltimore Road. The *Baltimore & Ohio Road* was, we think, commenced in 1833. In 1836 the cars were running to Frederick, 45 miles; but it was in 1854 only—*twenty years from its commencement*—the road was completed to Wheeling. It seems to have been a sort of experimental road. Before it was completed the whole theory of railroading prevalent at its commencement had been abandoned. In witness of this we may take the inclined planes east of Frederick, which, in 1836, were in full use, but have long since been thrown away, as worse than useless. Witness also the 120 feet grades on the road now, which would have been pronounced ut-

terly impracticable at the time the road was commenced.

The Baltimore Road has been made under great difficulties. Among its early Engineers were Colonel STEPHEN H. LONG, now of the corps of Topographical Engineers, and Capt. W. GIBES McNEIL. Both these gentlemen were men of abilities, and performed efficient service on the road. Its later success in construction is chiefly owing to BENJAMIN H. LATROBE, to whose great talents as an Engineer and a man of business this road may be regarded as a monument. Its financial affairs have been largely aided by LOUIS McLANE and Mr. SWANN, its former Presidents.

Now that the road is completed, its business begins to surpass all anticipations, and there can be no doubt of its great value to the stockholders, as well as the public.

2. THE NORTH-WESTERN ROAD.—The Baltimore Road being compelled to go to Wheeling, the North-Western Railroad was chartered and made, in order to *continue*, as it were, that road to the Ohio river, at a nearer point.

The North-Western Railroad is now completed from Grafton, on the Baltimore Road, to Parkersburg, on the Ohio, a distance of about 100 miles. This road has been *leased* to the Baltimore & Ohio Road, and therefore makes a continuance of that road.

3. THE CINCINNATI & MARIETTA R. R.—This road is scarcely inferior in importance to the Baltimore & Ohio, and makes the central link in the great line, which we are now contemplating. This road was chartered many years since, but active measures were not taken till 1850, and the work not commenced till 1851. In that year Mr. W. P. CUTLER, its President, commenced active exertions to procure funds, and in May, 1851, the county of Ross, largely interested in the road, subscribed \$300,000, the town of Chillicothe \$50,000; in the course of a few months the county of Washington subscribed \$200,000, the town of Marietta \$100,000, the town of Hamer \$50,000, the county of Athens \$200,000, and the city of Cincinnati loaned \$150,000. Individual subscribers took \$350,000 stock, and the contractors some \$300,000 more. Further subscriptions were made, and in fact this road commenced on about \$2,000,000 active means. Subsequently the Pennsylvania Railroad subscribed \$750,000 for the part between Marietta and Wheeling, and the city of Wheeling \$250,000. Thus, in 1852, the company had in all (with additional contractors' subscriptions) about \$3,400,000 as a *basis of credit*—a larger amount of solid capital than almost any company in the United States really had. Notwithstanding this, the company met with the greatest financial difficulties from unexpected causes. In the first place, the *cost* of the road exceeds by \$4,000,000 the original estimates; and secondly, it



was in the hight of its work and activity in the fall of 1854, when the railroad break down took place. From these difficulties it was extricated by its integrity and financial skill.

In its exhibit of December, 1852, the company represented the entire cost of the road at \$5,900,000, and its resources to be the capital above mentioned and \$2,500,000 first mortgage bonds; making up the cost of the road. The residue of the cost has been paid from second mortgage bonds and domestic bonds. The latter have been taken extensively on the line of the road, and by parties interested. In consequence of the large amount issued, they have sold low in the market; but we have no doubt will be fully redeemed.

The length of the Marietta Road is 167 miles from Marietta to Loveland; but, as this road has leased a right of way from Loveland to Cincinnati for its own cars, it may be considered one entire line from Marietta to Cincinnati, making 190 miles. The ferriage over the Ohio is about 9 miles, in consequence of the *termini* of the two roads not corresponding—a defect which will be remedied by the construction of a branch. The prospects of the Marietta Road as a freight line are, perhaps, equal to that of any road in America. Its western half passes through the richest agricultural section, and its eastern through a mineral region equally rich.

In the year 1851 the following was the yield of corn and wheat in the eastern counties, which lie on or near this road:

	Corn, bush.	Wheat, bush.
Clinton.....	1,504,280	201,445
Highland.....	1,699,554	304,201
Ross.....	3,460,456	296,430
$\frac{1}{2}$ Warren.....	500,000	81,000
$\frac{1}{2}$ Pike.....	440,000	22,000
Aggregate.....	7,604,314	903,076

This is an enormous crop to be raised on so small a space of ground comparatively. One *eighth* part of the corn of Ohio is here raised on one *twenty-fifth* part of the surface.

But it is not from the products of agriculture that this road is to receive its greatest profits. Undoubtedly the *seventy miles of coal, iron and salt rock* through which it passes, between the Scioto and the Muskingum, will ultimately be its great spring of strength and wealth. Already coal mines and iron works are developing along the line of the road, and it cannot be long before this whole line east of the Scioto will be covered with towns, factories, furnaces, and all the signs and attendants indicative of a great mining and commercial region. As a central link of a central line this road must ultimately rise to the highest measure of success and prosperity.

4. THE OHIO & MISSISSIPPI R. R.—The "Cincinnati & St. Louis Company" was, we believe, chartered in 1836; but nothing was done under that charter, except a slight subscription obtained by Mr. GEORGE GRAHAM. Under the present charter the first serious

efforts were made in 1852. The road had been surveyed both by O. M. MITCHELL and ERASMUS GEST. Under either survey the road appeared practicable at a moderate rate. In 1852 subscriptions had been made, or authorized, by the city of Cincinnati, to the extent of \$600,000; of St. Louis \$500,000; of Ripley county, Ind., \$100,000; Jennings county \$200,000; Knox county (Vincennes) \$200,000; and some other counties, which, with individual subscriptions, made, on the whole, about \$2,000,000, which was deemed reliable. At this time Prof. O. M. Mitchell was made Financial Agent, and took the practical management of the company for the next three years. At that time Judge ELLIS, of Vincennes, was President. The first great step taken was to make a contract with a company in New York, of which M. O. Roberts and George Law were supposed to be really partners, but of which H. C. SEYMOUR, Engineer, was the representative, to construct the entire road, on certain conditions, which involved, we think, the payment of only *five-eightieths in cash*. The residue was to be taken equally in stock and bonds. To make the last available, Mr. Mitchell went to Europe, and succeeded in negotiating with Mr. George Peabody, of London, the large amount of \$2,750,000, at or about par.

This was one of the most successful of Railroad negotiations, and to the energy of Mr. Mitchell, and the credit of Mr. Peabody is due, in no small measure, the success of the Ohio & Mississippi Railroad. In 1854 came on the dull times for Railroads. But this company met a very severe loss in the death of Mr. H. C. Seymour, the contractor, who was a man of energy, of ability and suavity. The surviving partners were bought out, and the contract to relet the road given chiefly to Mr. Henry Bacon, of St. Louis. He also was a man of energy and ability. The House of Page & Bacon made large advances to the road, but in the declining rates of Railroad securities, became deeply involved, and in the general pressure on private Bankers, failed, and went into liquidation. This was the darkest hour of the road. Long before this, however, the presidency of the board was conferred on JAMES C. HALL, Esq. In this hour of difficulty, he exerted himself with great fidelity to the interests of the road, but with small means. He went on for a time, but was obliged to yield to the storm; and although 80 miles of the road were successfully running, yet the Company was virtually compelled to stop. Censure has been cast upon Messrs. Hall & Mitchell, because they happened to be in the management when the road was unfortunate. But we who have had the most ample opportunities of knowing all the operations of the Company, hesitate not to say, that *but for the energy, activity and courage* of Messrs Hall and Mit-

chell, the Ohio & Mississippi Railroad would not, at this day, be made. The road was built almost entirely on credit, and that credit could only be obtained by the utmost energy skill and fidelity. If then there be any merit in the successful completion of the Ohio & Mississippi Railroad, it is due chiefly to Messrs. Mitchell and Hall. To these may well be added Mr. Henry Bacon, and the gentlemen who took the last contract for its completion. These were a New York Company, of whom Messrs. Barlow, Gould, Aspinwall, &c. are, we believe, the principals. This Company have finished the road, and that fact is the one now to be celebrated, in a manner suitable to the magnificence of the whole line. We have called this road the Ohio Valley Line, and so it is, but, in fact, it should be called the AMERICAN CITY LINE. Look what can be accomplished in two days by this in connection with other lines.

	Miles.
Portland to Boston.....	107
Boston to New York.....	236
New York to Philadelphia.....	87
Philadelphia to Baltimore.....	98
Baltimore to Marietta.....	133
Marietta to Cincinnati.....	167
Cincinnati to Vincennes.....	198
Vincennes to St. Louis.....	147

Aggregate Railroad.....	1,448
Aggregate population of the above cities and towns.....	1,785,000

Here the traveler may see the largest cities of America—a civic population nearly equal to two millions—traverse nearly 1500 miles of coast, and river, and mountain, and vale; through regions of iron and coal sufficient to supply the earth, and fields of grain which can feed millions—all in one great line of railroad, borne by the mighty power of steam! The conclusion of such a work is a fit era for celebration! An hundred victories on the battle-field, an hundred party triumphs, the overthrow of governments, or the rise of an hundred victors, are not equal, *in the scale of civilization*, to this one great event! It is well to celebrate it; for it is the triumph of science, of commerce, of freedom, of whatever is useful or beneficent in human institutions.

#### RAILROAD CELEBRATION.

Yesterday was the day of reception in Cincinnati for the guests of the various lines of railroad now simultaneously opened, and in the number of visitors, interesting character of its displays, and importance of events celebrated, is unequalled in the history of Cincinnati. But little more than half a century has elapsed since Cincinnati was a village of hardly a dozen houses, and to-day it is the home of two hundred thousand prosperous happy people—the point at which thousands of miles of railroad centre, and the great inland port of our mighty rivers. Cincinnati owes its growth to its own position and the rich agricultural country of which it is the natural centre. The completion of the lines



of road now open is the completion of the great artificial avenues corresponding to the natural channels of trade placed here by the Creator.

The number of strangers in the city yesterday has been variously estimated at from six to ten thousand persons, although excursion tickets had been issued to only about 2,500. The streets were decorated with flags, festoons, and appropriate devices, and business was generally suspended. In the morning there was a procession of our splendid fire department superior to that of any other city in the world. It elicited much admiration from the visitors. The great feature of the day, however, was the exhibition of the Steam Fire Department on the Fifth Street market space at four o'clock in the afternoon. As the hour for the exhibition approached the approaches in every direction were densely crowded with citizens and strangers. There must have been from twenty to twenty-five thousand persons assembled to witness the trial of the Engines. Precisely at four the alarm bell on the Mechanic's Institute sounded the alarm and signalized the district. The firemen applied the match to the furnaces, and in six minutes and a half the engines were on the ground, steam was up and water was thrown. The palm was awarded the Uncle Joe Ross. She threw a stream from an inch and a half nozzle two hundred and fifty feet.

In the evening the crowd of visitors around the Burnet House were addressed by Goy. Chase, Major Swan, of Baltimore, and the Hon. Tom. Marshall of Kentucky.

To-day the guests of the road visit St. Louis, over the great broad gauge of the West.

#### LIQUIFYING QUARTZ.

Our readers will remember an extract which we published a short time since from an English journal, stating that a new and important method of treating gold-bearing quartz, by solution, had been discovered. By a singular coincidence, this method has been discovered in opposite portions of the world at the same time. Prof. Hardinge, of New York, has made public his discovery, which gives results so wonderful that, were they not well authenticated, they would be received with utter incredulity. By Prof. Hardinge's method it is claimed that a ton of quartz may be dissolved and the metals disseminated in the rock all precipitated by an hour's treatment; and that the quartz solution thus obtained can be moulded into any desirable shape for building or ornamental purposes. The following is the certificate of Prof. Moffat, late U. S. Assayer:

I have been for more than a year investigating the philosophy of dissolving quartz according to the system adopted by Benjamin Hardinge, Esq. I have satisfied myself of the practicability of reducing quartz rock to a liquid as limpid and clear as pure spring water, by means of humid heat and some simple solvents, and

other chemical agents, at a very small expense. I saw hogheads of the liquid quartz at Mr. Hardinge's premises. It was equal parts of water and stone, which fact was demonstrated by precipitating the quartz.

In a liquid state, if left to stand in a cistern, all metals will fall to the bottom, by which means every particle of gold or other metal may be obtained, and melted into bars.

Gold quartz rocks, in many mines, are known to contain generally from 50 to 500 pounds in a ton, and in some instances from one thousand to five thousand dollars; which may be obtained for a comparatively small expense. Machinery may be erected for from six to ten thousand dollars that will dissolve ten tons a day; and the liquid quartz will be a source more wealth to the proprietors than the gold from ordinary veins, from the many uses to which it may be applied.

I have not only examined Mr. Hardinge's theory, but have witnessed many experiments by him in the presence of other gentlemen, which were highly gratifying and conclusive. I have seen the complete analysis on the one hand, showing, to our astonishment, the quantity of flint in solution, and have also seen it perfectly solidified into colored glass. I have also seen Mr. H. repeatedly change the liquid flint into a semi solid or plastic state, and mould it into any form.

These and other subsequent proofs, in the strongest tests, confirmed me in the full conviction that, by the working of his patents in California and in the Southern States, every particle of the gold can be obtained from quartz; whereas by the old process, now in use, not more than one-fourth of the gold is ever saved.

JOHN L. MOFFAT.

The importance of such a discovery as the above, if it be fully substantiated, cannot be over-estimated. Aside from the prospect of an increased production of the precious metals, alone of vast importance, in view of the constantly increasing wants of trade and the business world, its industrial bearing, if the economy of the process be stated truly, is one of the greatest interest. If beautifully crystalized blocks of quartz can be afforded as cheap to the hand of the mason as brick, where is the man who would not prefer it as a building material. We look with interest for the development of this process.

#### THE CANADIAN INVESTIGATION.

We have already given our readers some of the leading facts brought out by the recent Parliamentary investigation.

We find some additional ones in the Montreal *Commercial Advertiser*, of May 16. In an article headed Railway Corruption it says:

We have hardly patience to pursue the monstrous revelations now making before the Parliamentary Committees. We shall however narrate some of the facts.

Mr. Isaac Buchanan continuing his evidence, said:—

I should also wish to mention what made those acting for the Great Western Railway so anxious not to leave Mr. Rankin in the position of an injured man, even according to his own ideas of right and wrong. The Great Western Railway had suffered severely in the matter of the land for their right of way, through the interference of parties pretending to be aggrieved, and Mr. Rankin, as a member for the county, had much in his power in this way. He had also actually threatened that he would use his influence in this way along the whole line, and would make any Company who would not connect themselves with him pay a hundred thousand pounds more for right of way than they would otherwise do. This threat was made to my agent, Mr. Greer. A similar threat, reported to have been made to Zimmerman, we believed to have been the cause of that gentleman's anxiety to have Mr. Rankin's co-operation, as we did not at that time

know of the existence of the agreement to give Mr. Rankin a share of the contract or £25,000.

Mr. Hodge an Engineer testified that, in 1853, Mr. Henry DeBlaquiere, being then a Director of the Company wanted to purchase a farm of one Axford, near Simcoe, through which the Railway ran by the original survey; but Axford declined selling. Thereupon the witness was ordered to make another survey, and take the line through a farm which Messrs. DeBlaquiere & Farmer had purchased; a Depot was fixed here without consulting the Chief Engineer. The alteration involved a much larger cost, the old site being better, the line more cheaply constructed, and the situation more eligible for the town of Simcoe which had contributed largely to the road.

Mr. DeBlaquiere received \$50,000 from Mr. Zimmerman for getting him the contract; tenders were not advertised for; three were put in; the lowest, Hall & Co., of Hamilton, £6783 a mile. Mr. DeBlaquiere obtained from Mr. Hall in confidence the amount of his tender, and strongly advised him to raise it; he did so, and by this knowledge and advice, Mr. DeBlaquiere obtained his contract for Zimmerman.

Alexander McBean a sub-contractor was deputed to operate on Mr. Hunt the Reeve of Wyndham in relation to the loan of £25,000 to be obtained from that Township; and the Company gave him £1000 for that purpose; he agreed with Mr. Hunt for £900, and pocketed the balance.

The amount of work done on the road amounted to £32,000; the Directors sanctioned estimates for £87,000, and paid the contractors out of the money of the Municipalities. They were thus liberal to put the Contractor in funds to pay the bribes covenanted to themselves. Mr. DeBlaquiere's receipts out of this road amount to nearly £50,000.

#### ON A PACIFIC R. R. FROM THE MISSISSIPPI OR SOME POINT NOT FAR WEST OF IT.

The writer of this has already written much on this subject; but the importance of the subject will justify more. As fast as old objections are refuted new ones are started. But the grand and patriotic position which Mr. Buchanan, in accordance with the Cincinnati platform, has taken on this question, may well give to hope new enthusiasm, and to exertion new vigor.

It has been recently said that the Pacific Railroad would not be thought of but for the commercial advantages derivable from it; that as a mere means of military defence and protection, national resources would never be applied to it. This idea must proceed upon the supposition that we are inferior in patriotism and discernment to the other civilized nations of the earth. As science has discovered new means of putting on additional armor of defence or offence, they have promptly adopted them. England and France are intersected by railways, by means of which every important part of each country could have a force rapidly concentrated. All the great modern inventions in artillery and firearms of every description have been eagerly



adopted by them. Hence nations that fall behind them in availing themselves of these advantages are terrified or subdued, by a short contest, into submission to their terms. The Persian quickly gives over the magniloquent Asiatic gasconade that might have had some foundation a long time since, and subscribes to the terms prescribed to him. The poor Chinese, confident in his numbers and in the good fortune of the Celestial empire, and sure that his multitudinous numbers cannot be more than decimated by the greatest rapacity of the outside English barbarians, looks, nevertheless, with fearful apprehensions at the destructive power of the improved guns and war ships of the British. Even Russia, for want of great railroads, in a comparatively brief struggle, was compelled to make a treaty more humiliating than any she had made in more than a century.

But not alone do modern times witness the efficiency of celerity and adequate force in arresting and preventing the calamities of war. The Romans were a people who from small beginnings rose to the mastery of an empire which, in population, improvement, extent and duration, considered together, has never been equalled. Some empires have been more populous—as the Chinese and one or two others—but the Roman empire, in the days of Augustus, and for centuries after, comprehended under one dominion, through which but two languages were generally spoken, a population of a hundred and twenty millions of people, and the fairest portion of the old world. The Romans did not gain this great ascendancy and wide domination but by systematic efforts, both in war and peace. Never any nation better understood or more systematically practised the principles of war. There was also much of good policy in her laws while rising to the control of nations; there was much private virtue. There was no divorce in Rome, *ab urbe condita*, for five hundred years. Though the law allowed it, the affection and pride of the husband, combined with the modesty and industry and love of the wife, scorned it. To be a Roman was to be somebody who must be protected—and this from an early period of the State—if it were in the power of his country to protect him. If he went in comparatively small numbers and founded a feeble colony in a newly-conquered territory, one of the first things the Romans did was to build a road to him, that the wing of the republic might cover him; or, to speak literally, that the brave soldiers at home might run to its assistance with all the celerity practicable in the existing state of art and science. And, such was the effect of the systematic attention to her roads, that in those tremendous trials in which she struggled for existence, when dire Hannibal was thundering at her gates, they were as essential to her deliverance and final march to the summit of

empires as were the admirable skill and valor of her soldiers and officers. Such roads as she had with long toil and care constructed were absolutely necessary to her in this great crisis of her fate. We shall proceed to show this from Mr. Gibbon, who was profoundly learned in this part of the Roman antiquities, as well as in most else that pertained to Roman polity and doings, and resources in war. It is to be observed that what he says in the first sentence, as to the Romans despising the provinces, refers to the *conquered* people, and not to their own colonies in those provinces, which at length grew, in Gaul, Spain and Portugal, to be so populous as to constitute at least one-half of the inhabitants. It was to defend and maintain these colonies in prosperity that the Romans made these roads for the transportation of their armies and their necessary equipments. We now quote from Mr. Gibbon:

"The motive of the Romans in making roads was neither the benefit of the provinces, which those conquerors always despised, nor the convenience of commercial interchange, of which they never knew how to estimate the value; but merely to facilitate the marches of their troops. Greece, which early became an interior and submissive province, was not in any of the direct lines which united Rome with the frontier, and had but one only road, while the other parts of the empire were intersected by military ways in all possible directions."

Now, as to the utility and effect of these roads on memorable occasions, in giving ascendancy and victory to the Romans, the following example may suffice. As none but Romans probably could have performed such a march as the one about to be mentioned, so even Romans themselves could not have performed it but on such roads as they had systematically constructed. We, therefore, again quote Mr. Gibbon:\*

"I shall speak briefly of another kind of traveling, the *march of troops*. These marches, I am inclined to think (both by the exercises of which I have made mention and by my general opinion on the subject), were longer than ours; but, previously to making the researches necessary for determining this matter with precision, I shall cast a glance on the longest and boldest march which I have ever met with in history, either ancient or modern.

"The fortune of the Carthaginians was sustained in Italy by the exertions of Hannibal, when Asdrubal crossed the Alps with a numerous army. The republic was in danger of sinking under their united efforts. Nero, the consul, observed the motions of Hannibal, who exhausted the whole science of marching and countermarching. The Roman general perceived that a bold stroke only could ward off the dangers which threatened his country. With a chosen body of a thousand horse and six thousand foot he marched from his camp, deceived the vigilance of the Carthaginians, effected a junction with his colleague in Umbria, saved the republic at the

battle of Metaurus, and returned with the same celerity, announcing to Hannibal the death of his brother, and finding that general himself still astonished and inactive. He had left Hannibal in the neighborhood of Canusium—he found the Consul Livius in that of Sena Gallica. His route through the territories of the Larinates, Frentani, Marrucini, Pretutii and Picenum, into Umbria, was about 270 Roman miles. I know not how many days he employed in marching thither; but I know that only six were spent in his return.\* Expedition became daily more necessary; and it is not a small stain on the glory of Hannibal that he remained ignorant for twelve days of the departure of the Roman general. 270 Roman miles in six days give 45 Roman, or 40½ English miles for each daily march. The fact is scarcely credible. Nero's forces, indeed, were selected from the whole army; he marched night and day, and the zeal of the allies co-operated with the attentions of the general in procuring for them in abundance every comfort and assistance proper for softening their fatigues and reviving their strength. With all these advantages it would be impossible for modern troops to make such a march. To accomplish it required Romans, and Romans of the age of Scipio. As soldiers, their bodies were patient of fatigues and toils; as citizens, they had a country for which to fight."

It has been said that those transcendently valuable parts of our Union on the Pacific could be defended without this railroad; and that, as necessary thereto, it would be proper and preferable to building this road by any kind of appropriation from the Government of the Union, to build and equip a vast navy. Besides that this would be much more expensive than the railroad, it could not transport men in time to the scene of action. Whenever our Pacific possessions may be attacked it will be by a mighty force, both naval and military. The blood that would be shed in the defence would be far more than we have any right to require a single section of the Union to pour out for the interest of the whole; and it would be far more than would be shed could we at once assemble a force adequate to the great emergency. We, who claim to be Christians, should be at least as considerate and compassionate towards the lives of our fellow countrymen as the Roman Senate was. Mr. Gibbon, in his remarks on the Roman triumphs, gives this striking passage: "I perceive also that they were not less attentive to the safety of the citizens than to the glory of the State; and more than once refused triumphs to victorious consuls who had purchased their triumphs by an unnecessary or useless prodigality of Roman blood.† They thought it their duty to repress the cruel ambition of leaders, by refusing to them a triumphant return into a city which they had filled with mourning." And I think it the duty of the American people to repress and reject the cruel policy of any leaders whose proposed systems of defence must inevitably produce similar results.

\*The first quotation is from Mr. G., vol. 3d of his Miscellaneous Works, Dublin edition, p. 100; and this quotation same vol., p. 102. The last of my three quotations in this essay p. 140 of same vol.

\*Tit. Liv., ch. XXVII, 50; XXVIII, 9.

†Tit. Liv., X.



We talk much of our immense progress, and, in some respects, with good reason; but we shall come to a dead halt in our progress if the policy proposed by some in regard to this railroad be adopted. Let us rather rally to the policy which President Buchanan has sketched on this subject—to the sage and profound views which he has uttered on this question, assigning in few words, “like apples of gold in pictures of silver,” the potent general reasons that demand of the Government properly to aid it.

Other empires have grown to as great, and even greater population and territory than ours, and yet have become divided and decayed by the folly and wickedness of the rulers and people. For a time—whilst rising to great power—they could practise some of the most important virtues that build and strengthen the social fabric; but, as wealth and population increased, the ignorance of the people and the ambition of the rulers combined to overthrow the State. Thus Rome, after a long period of greatness, was separated into two empires, and finally destroyed. The Arabs underwent a similar fate; and the Mogul empire has long since disappeared altogether—a people of whom Mr. Gibbon, speaking of them as they were in the days of the founder, Gengis Khan, says, “the fiercest of men were mild and just in their intercourse with each other.”

With respect to the best route, the author of this article thinks that through Texas, and on by El Paso, to be much preferable; but that it is possible to devise a scheme which, without extravagance, may satisfy both the South and the North.

W. A.

CLEVELAND & TOLEDO R. R.—The receipts of the Cleveland & Toledo Railroad for  
April, 1857, were..... \$133,197  
Same month 1856..... 130,329  
Increase..... \$2,868

PENNSYLVANIA R. R.—The April receipts of the Pennsylvania Railroad are large, though not equal to those of April last year. The following is the statement:  
From freight..... \$328,360 77  
From passengers..... 163,745 89  
Total..... \$492,106 56  
Same month last year..... 549,645 61  
Decrease 1857..... \$57,538 75

NEW JERSEY CENTRAL R. R.—The earnings of the Central Railroad Company of New Jersey for the month of April, 1857, were..... \$63,343  
Same month last year..... 40,389  
Increase in April, 1857..... \$22,954

—NEW RAILROAD BRIDGE AT PEORIA.—A bridge 600 feet long has just been completed across the Illinois river at Peoria, connecting the Peoria & Oquawka Railroad with the Eastern Extension Railroad. The bridge was tested by a train of cars and locomotive, weighing about 80 tons, having been run over it without causing the least vibration.

# SONORA EXPLORING AND MINING CO.

Report of operations for the month of March.

The officers of the company are pleased to inform you that the reports of the Agent and Engineers of this company for the month of March have been received, and exhibit a satisfactory state of progress. At the date of the last report, Feb. 26, the Engineers had opened the “Heintzelman Mine” sufficient to show that it was a regular vein, and of great purity. The assay of a single pound of ore was then received in the shape of a button, weighing 1 oz., 1 dwt. and 16 grs. Troy. This would indicate a yield of at least one dollar to the pound of ore reduced. The report now received, under date of March 31, proceeds to state:

“At the first of the month Messrs. Brunckow and Schuchard, with some Mexican guides, made an expedition to the Pajarita Mountains, to examine a vein supposed to be silver ore; but, upon examination, it turned out to be a mountain of iron. The expedition also resulted in the discovery of an extensive forest of live oak, which may be interesting to our railroad friends—a statement of which by Mr. Schuchard is enclosed.”

The importance of the early information of this discovery to this company cannot be overestimated. In view of the fact that the Pacific Railroad must seek this route, and that Tubac, the headquarters of your company, must be a point on this road, the discovery of iron in the vicinity of its route is a circumstance of the highest importance. The officers have also been assured by a gentleman of high respectability in this city, who visited this region some years ago, in company with a government expedition, that coal exists in about the same locality; that he had seen pieces brought into camp by the Indians.

The report proceeds: “The mining and prospecting operations at Cerro Colorado have been continued vigorously during the whole month, having worked three gangs of hands in the HEINTZELMAN MINE eight hours each, miners’ time, making the twenty-four hours. The shaft is about 30 feet deep and 8 feet square, and the vein holds regular, increasing in size and purity. The amount of ore on the surface is valued at \$3,000.

“At the depth of 50 feet Mr. Brunckow, our Mining Engineer and Director of operations at Cerro Colorado, has ordered a drift or fronton to be commenced towards the north, which will fully develop the size, course and inclination of the lode. We can assure you that in this same region we have discovered and now hold possession of twenty-eight different and distinct veins, which will all probably prove as rich, and perhaps richer than the ‘Heintzelman.’ We only await the means necessary to place them all in a state of development and yield.

“As this report will close the labors of our fiscal year, I beg to condense a statement of what has been done here, under the greatest disadvantages, and without adequate facilities for proper action.

“In the Santa Rita Mountains we have pros-

pected, discovered and acquired title to twenty-four distinct mines of silver—cleaned out the Salero to the depth of 80 feet, and made other excavations. In the San Coyetano Mountains we have prospected two lodes of silver ore, built huts, and established a possession. La Arivaca has been acquired by purchase, including by its water privileges vast territories of mineral wealth, which can never be worked by other parties. Cerro Colorado has been discovered and occupied by the servants of the company, and promises a richer yield from its accessible treasures of wealth than the far famed Arizona, and was appropriately named by our friend Laoisa, ‘The Region of Silver.’

“These mines will afford profitable employment to five thousand hands, and yield an amount of treasure, of which we can form no adequate conception at the present time. We know of many other regions of silver, containing old mines, filled with water and abandoned by the Spaniards, which we can readily take possession of, if such be your pleasure.

“I regret to inform you that a party of Fillibusters are preparing for an invasion of the adjacent State of Sonora—the information from California will reach you long before this letter. I have advices from the commanding officer at Fort Yuma that 150 men had crossed there en route for Sonora, and that they expected 1500 by sea to disembark in the gulf. We have actual information of 300 men with artillery having landed at Port Lobos. A camp has been formed near Calabazas, and twenty-five or thirty men recruited there with the full knowledge of the United States officers at Calabazas.

“Under these considerations, fully foreseeing the difficulties that will ensue, I have considered it my duty to the company whose interests are entrusted to my management, to address a note to Major Steen, U. S. Army, commanding at Calabazas, embodying this information, a copy of which is enclosed, and which I hope will meet the approbation of the company.

“In addition to this it will be quite unnecessary to say anything of our views on the subject. Our influence, character, and property are staked against the unlawful measure, and in the fulfillment of this duty we claim the protection of our government, or in default of this, damages for the want of that protection to our property and business which we have a right to claim and expect.”

The following is the note addressed to Major Steen:

TUBAC, 1ST APRIL, 1857.

MAJOR E. STEEN, 1ST DRAGOONS, U. S. A.,—  
Commanding at Camp Moore, Calabazas—

SIR:—I take the liberty of informing you that the “Sonora Exploring and Mining Company” acquired by purchase in the month of December last the Rancho of La Arivaca, including valuable mines, with the view of commencing an early development of its resources.

The continual inroads of Apaches in large numbers have to the present time prevented the population of the Rancho; but late advices



from the Company indicate that they expect something to be done. I have therefore made arrangements to populate the Rancho in the present month, and will have necessarily to place there a valuable stock of provisions, mining tools, material and animals.

I have been credibly informed and believe—you are also aware of the current rumor—that a large body of armed men are forming in this Territory for the purpose of invading the adjacent State of Sonora, in which they will have to pass near or by the said establishment of La Arivaca, and if they should pass into Sonora would probably disturb our regular receipt of supplies, to the detriment and damage of the Company's prosperity and business.

I beg leave simply to advise you of these facts, and to request that you will acknowledge the receipt of this notification, to be transmitted to the Company, whose Agent I am, to be laid before the proper department of the Government as a basis for a claim for damages in case of the destruction of their property or rights by either Apaches or Fillibusters.

I have the honor to be, very respectfully,

Your obedient servant,

CHARLES D. POSTON,

Managing Agent, S. E. & M. Co.

The Company will thus see that its Agent has taken every proper step that would tend to the development of its resources or the protection of its rights. It remains only to furnish such an amount of means as may be necessary to place these mines in a state of active development, and before the end of this year the results obtained will justify the present high expectations entertained by your officers.

#### NEW MOTIVE POWER—ELECTRO-MAGNETISM.

The paper read at the Institution of Civil Engineers, on 21st inst., was "On the Application of Electro-Magnetism as a motive power," by Mr. Robert Hunt, F.R.S.

The author commenced by giving the progress of the investigations by which Oersted first proved the connection between electricity and magnetism, and which led Sturgeon to construct the electro-magnet. The powers of this form of electric force, as developed temporarily in soft iron naturally induced the idea of employing it for the purpose of exerting mechanical motion—doing work. The principles of the electro-magnetic machines of Dal Negro, of Botta, of Jacobi, of Armstrong, of Page, and others, were next described. It was shown that all engines acting by a direct pull were inefficient, from the circumstance that the repeated blows received by the iron so altered its character that it eventually assumed the quality of steel, and had a tendency to retain a certain amount of permanent magnetism. This induced Jacobi, after a large expenditure of money, to abandon arrangements of this kind, and employ such as would at once produce a rotatory motion. The engine, thus arranged, was stated to have been tried upon a tolerably large scale on the Neva, and by it a boat containing ten or twelve people was propelled at the rate of three miles an hour. Page's engine, and that of Hjorth, which in 1851-52 excited much attention, was described as being in principle an electro-magnetic piston drawn within or

repelled from, an electro-magnetic cylinder. By this motion it was thought that a much greater length of stroke could be secured than by the revolving wheels, or discs. After having generally described the forms under which electro-magnetic engines had been constructed, the author proceeded to give, as the result of his experiments, confirmed by those of others, the difficulties which still stood in the way of the application of electricity as a motive power.

In the first place, it was pointed out that the loss of power through space was very great, and that the lifting power of any magnet was not to be regarded as the power it was capable of exerting at a distance from its poles, howsoever short that distance might be.

In the second place, it was shown that, supposing the reduced force exerted by two magnets, a few lines apart, was considered available for driving machinery—the moment the magnets began to move in front of one another, there was again a great additional loss of power. As the speed of the engine increased, there was curiously a corresponding diminution of available mechanical power, a falling off in the duty of the engine as the rotations became more rapid.

In the third place, the conditions of the voltaic battery were considered,—the generation of electricity was dwelt on,—the mode by which it passed from one plate in a series to another,—and the loss of power consequent upon the resistances, in passing from a solid to a fluid, and again from a fluid to a solid, was explained. It was insisted, that under any circumstances, with the present forms of the voltaic battery, it was useless to attempt to utilise, in this direction, the chemical electricity generated. All study should be directed to the development of electricity by chemical action, so as to secure, if possible, the whole of the electricity developed by every change of form in matter. More emphatically the author endeavoured to enforce the law, that all mechanical force, of whatever kind, whether horse or man-power,—steam-power,—or electrical power,—involved a change of the forms of matter to produce that force. That to produce motion, it was essential to use matter, and that virtually, in all cases, it must be destroyed as a useful agent. Thus—that a man or horse moving a weight, consumed muscle equivalent to that weight, and the space through which it moved. That a steam-engine drawing a train, pumping water, or impelling any machinery, consumed, in the production of steam, a quantity of fuel exactly representing the work done. That in producing motion by electricity, the element changing its form to produce that motion was one of the solid agents employed in the battery, and the exciting fluid element used.

An equivalent of matter, in changing its form, would produce an equivalent of force, which might be rendered available; but as there was a constant relation between the chemical combining proportion of any element, and its capability to produce mechanical power, the question of the application of electricity, as a motive force, was narrowed to the inquiry into the quantity of power produced relatively by fuel in the furnace, and by zinc or iron in the battery. It had been proved by experiment, that 6 grains of carbon in the fuel produced a motive power equal to 32 grains of zinc in the battery, and that under the best possible conditions, an equal result would be secured, by the combustion of

6 pounds of anthracite coal—the most carbonaceous fuel—as by the conversion in the battery of 32 pounds of zinc into oxide. Another and a parallel form of putting the case was, that the 32 pounds of zinc burnt in the furnace would develop precisely the same quantity of heat as that which would be obtained from burning 6 pounds of charcoal in the same furnace. That whether producing heat during combustion, or electricity during chemical change, the mechanical force obtained would be precisely the same. Hence the commercial question of cost was greatly in favor of steam, and adverse to the use of electricity as a motive power.—*Railway Times.*

#### LONDON TO LAHORE—THE EUPHRATES, SCINDE AND PUNJAB PROJECTS.

The following is an extract from the last report of the Punjab Government on its projected railway communications:

"So far as the commercial and material interests of the Punjab are concerned, there is a proposed line from the northeast to southwest, which is of greater consequence to the country than any public work, or any number of works that could be specified. A glance at the map will show that Northern India has two natural divisions—first, the provinces of the Ganges and its tributaries; second, the provinces of the Indus and its tributaries. In the first or easterly division, the stream of trade and wealth must ever flow down the valley of the Ganges to the natural outlet of Calcutta. In the second or westerly division, if the power of art and science be brought to the aid of nature, the commerce could follow the direction of the Punjab rivers to the Indus, then down the valley of the Indus towards the rising port of Kurrachee, which is destined to be to the northwest of India what Calcutta is to the northeast. A line drawn north to south, somewhere near Agra and Delhi, will form the probable boundary of the two natural subdivisions; and if the same facilities were created westward which exist eastward, then all the commerce west of the line would follow the Indus to Kurrachee, in the same manner as the commerce on the east follows the Ganges to Calcutta. At present, however, the major part of the commerce of the extreme northwest travels eastward, merely from the want of a more direct route. But, if the great route of the Indus were to be thoroughly opened, this commerce would go straight to Kurrachee. To this port there would then come the products from the Northwestern India and from the Central Asian countries beyond that frontier; and, in exchange for these, the products of European countries. In this same direction there would also arrive the vast quantities of Government stores and materials for the military and public establishments in that quarter, and a large number of European travelers would frequent the line (in preference to the eastern route), on account of its comparative shortness and proximity to overland passage to Europe.

"For the opening up of this western route, the importance of which, upon general considerations, is so evident, it is proposed, in the first place, to establish communication by rail and steam from Kurrachee upwards to Mooltan (a distance of 425\* miles), just above the point where the Punjab rivers join the Indus. For the first section of this line a railroad from Kurrachee to Hyderabad on the Indus, a dis-

\*By rail and river, above 600 miles.



tance of 123 miles, has been undertaken by the Scinde Railway Company. At first, the line may be continued thence up to Mooltan, by steamers on the Indus, to be followed by a railway as soon as it can be constructed; there would then remain to be constructed a railroad from Mooltan to Lahore and Umritsur, to join or cross (or rather continue) the great Northwestern line between Calcutta and Peshawur. It is this last-named railroad, from Mooltan to Lahore and Umritsur, which immediately concerns the Punjab; and the Supreme Government have directed complete inquiries on the subject to be made. It will now be proper to state briefly what the advantages and facilities of the line are likely to be.

"The northern terminus of the line will be Umritsur, which is not only the first mart in the Punjab, but also one of the first commercial cities in Upper India. Its merchants have dealings not only with all parts of India, but also with many parts of Europe on the one hand, and of Central Asia on the other. To this city there come the choicest Asiatic products, the wool of Thibet, the shawls of Cashmere, the dried fruit and spices of Afghanistan, the carpets of Turkey, the silk of Bokhara, the furs and skins of Tartary, the chintzes and leather of Russia. In return for these arrive the piece goods and iron of Europe, the fabrics of Bengal, the sugar of Hindostan and the Punjab. To the same emporium are gathered all kinds of indigenous produce of the Punjab. Of this trade, amounting, according to reliable returns, to three and a half million pounds sterling per annum, a large portion proceeds to and from Calcutta, by the Grand Trunk; another portion to Bombay by difficult and laborious land routes, through Central India and the desert routes of Rajpootana; and a third portion (and at present the least portion) to Kurrachee, by water carriage on the Indus and its tributaries. Of this traffic, then, nearly all would be diverted to the proposed railway from Umritsur to Mooltan, and thence to Kurrachee. From these parts most things intended for export would not go to Calcutta if there were facilities for going to Kurrachee; and of those things destined for Bombay all would go by rail to Kurrachee *via* Mooltan, instead of the arduous route through Central India. In the same manner all the imports for Umritsur, and other parts of the country between Delhi, to the northwestern provinces' frontier, and the regions beyond it which now come from Calcutta or from Bombay by land, would proceed to Kurrachee, and thence upwards by rail.

"But, besides the noble traffic above indicated, which is of general as well as local interest, there is already a traffic of some magnitude between the Punjab and Kurrachee. So strong is the tendency of trade towards the natural port and outlet, that large quantities of indigenous produce creep and labor in clumsy native craft down the Five Rivers. In this manner hundreds of tons of cereals, linseed, sugar, saltpetre, indigo, pursue a tedious way over 400 miles of the Five Rivers to the seaboard. The water traffic is greatest on the Sutlej, next on the Jhelum, then on the Indus, and lastly on the Chenab and the Ravee. The united traffic of the rivers up and down (the greater part, say four-fifths, being down traffic), as ascertained by registration of boats at the junction point, Mithun Kote, on the Indus, is not less than 700,000 maunds, or 35,000 tons per annum. Now, if the rates

of carriage by rail should be kept low, so as to attract commodities which can only afford to pay for cheap transit, then it may be certainly presumed that of the above quantity all that pertains to the Sutlej, the Ravee and the Chenab, and a part of that belonging to the Jhelum, will be diverted to the Umritsur and Mooltan; and if the railway up to Peshawur should have been established, then almost all the traffic of the Jhelum, and much of the Indus traffic, would proceed to Lahore, and thence down the rail to Mooltan. The present means of navigation being wretched, and the rivers being difficult, the existing water traffic would preferentially take the railway; provided, always, that the cost of transit be cheap. It is, indeed, for the sake of this indigenous traffic that every well-wisher of the Punjab people must be anxious to see the day when the rail shall be opened from Umritsur to Mooltan. The traffic may be already considerable and promising, but it is now as nothing compared to what it would become with the advantages of a rail. In the chapter on land revenue, the enormous and increasing production of cereals beyond the present consumption, the probable surplus produce amounting to a quarter, perhaps half a million of tons annually, the quantity of unreclaimed land capable of production, the great productive power of the people, were demonstrated. Wheat of excellent quality is grown, and this is eminently a corn-producing province. Sugar-cane of first-rate quality is already grown. Indigo of similar quality can be produced; it is already exported to a considerable extent, though at present of inferior quality, owing to the defective mode of manufacture. It has been recently proved that good linseed in considerable quantities can be raised. If sufficient pains be taken, many hundred tons of fibre can be prepared. From some parts good hemp could be exported. From many thousand square miles the saline nature of the soil offers unusual facilities for the manufacture of saltpetre, which is even now largely made to meet a foreign demand; and from the same soil carbonate of soda could be profitably made. The numerous flocks of sheep in the extensive pasturage of the central districts, and in the hills and valleys of the north, yield a wool that is already exported, and which might become an export of magnitude. There are various articles of manufacture fit for exportation, such as the shawls, stuffs, silks and carpets of Umritsur, Lahore, Mooltan, Noorpore and Loodhiana. It were vain to specify the amount which might be exported by the rail, but none acquainted with the Punjab could doubt that the aggregate would be enormous. Lastly, independently of European travelers, who would be numerous, the number of native passengers would prove most profitable. Between the cities of Lahore and Umritsur, the transit of passengers has greatly increased since the completion of the new road; the average of travelers to and fro is not less than a thousand persons per diem; and whereas six years ago there was not twenty ekkas (small one-horse vehicles carrying two or three persons) in Lahore, there are now some 250 running daily between the two cities. It is believed that from this source alone a railway might, even on its first opening, realize 10,000*l.* per annum on a section only thirty-five miles long. A similar passenger traffic would doubtless spring up between Lahore and Mooltan; and it may be added that the route *via* Kurrachee would be frequented by pilgrims to Mecca.

"Again, if the advantages, present and prospective, of this line when constructed are great, so also are the facilities for its construction remarkable. Though the country situated above its northern terminus is rich and highly cultivated, yet the particular tract through which it will run is for the most part poor. Between Mooltan and Lahore, a distance of 240 miles, the country is a dead level, hard and waste. In the first place, then, there will be no cultivated or inhabited ground to be bought up. The price for the land will be almost nominal. There are no engineering difficulties whatever to be met with anywhere between Lahore and Mooltan. The Doab, or country lying between the two rivers, Sutlej and Ravee, is elevated in the center, and the sides slope gently off towards the rivers.—From the center or backbone of the tract there naturally run drainage channels to the rivers; consequently, while a road traversing the Doab, near the banks of either river, must cross or be intersected by numerous little streams, a line constructed in the center would meet none of them. But the railroad would run near the central or dorsal ridge, parallel to the course of the new Barree Doab canal, and, consequently, the line will perhaps not meet with any stream whatever. There being no streams, nor depressions, nor elevations, there will consequently be no bridges, cuttings, or embankments, on at least four-fifths of the distance. As it approaches Mooltan, the line would have to be carried across a few small irrigation canals, and to be partially raised. In short, it would be difficult to select, or even imagine, a campaign more suited for the cheap and easy construction of a railway than the country between Lahore and Mooltan. Between Lahore and Umritsur the country is fairly cultivated and generally level. It offers no engineering obstacles; but there would be three or four small streams and one canal to be bridged. As regards material, the iron would come from England; timber and wood of the best quality is obtainable from the hills by water carriage; firewood exists in the utmost abundance; kunjur would be generally procurable for at least half the distance; masonry would not be much needed; if it were, there are ample facilities for brickmaking; the population near the line is sparse, but labor is largely procurable from other parts of this country for any great work.

"The absence of physical and engineering difficulties is indeed most fortunate. For economy and even cheapness of construction will be essential to enable the railway authorities to fix the transit line at low rates. The passenger traffic and the more valuable commodities and products would be considerable, and might bear tolerably high rates; but for a mass of produce, great in bulk but comparatively less valuable, lower rates will be indispensable; for the goods trains' speed will generally be of less consequence than cheapness of hire. It is upon this condition, viz: that of moderate hire, that the rail may be expected to supersede the native river boats. In a succeeding chapter the improvement of the river navigation will be urged. If this most desirable end should be accomplished, as well as the railway, the one will not interfere with the other; there will be such a great development of commerce and of national resources, that there will be ample scope for both rail and steam, and each will have its legitimate functions for the enhancement of wealth and civilization."



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rt.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1800	1st mortgage.	.....	Albany, L. & H. p's'r	173	5,000,000.00					
498,800	6			1862-3	2d "	.....	Androscog'n & Kennebec	54.55	1,400,000.00			209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange..	86.5	1,000,000.00	199,009.00		272,123.74	172,780.74	4 pr. ct. 6m
52,646	0			now	"	.....	Eng'r, Old P. & Milford..	12.5	135,000.00	52,646.26		39,104.40	8,671.61	15,000 in '53
500,000	7		N. Y.	1866	1st mortgage.	.....	Boston & Worcester..	44 5-8	4,500,000.00	500,000.00		1,108,781.90	437,062.03	180000 4.5m
300,000	7			1857-9-62	Income.	.....	Buffalo & State Line..		1,300,000.00					5 pr. ct. 6m.
200,000	7			1864	Domestic.	.....	"							
577,187	6			1872	4th mortgage.	30.	Central Ohio.							
192,200	7			1874	1st mortgage.	.....	Champion & St. Lawrence	43	1,872,800.00	1,601,087.00		163,200.00	77,700.00	10 per ct.
380,000	7				2d "	.....	"							
1,440,000	7			1864-7	Domestic.	.....	Ch'r'l's & South Carolina..	110	1,750,000.00	380,000.00		291,219.56	47 per ct.	\$72,300
1,200,000	6-7-8		N. Y.	1865-9	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	133	3,746,900.00	3,114,000.00		1,095,185.00	571,725.23	15 pr. ct. 6m
374,000	8			1868-76	2d "	.....	"							
1,300,000					Convertible.	.....	"							
532,000					1st mortgage.	.....	Chicago, Fulton & Iowa..							
104,000					2d "	.....	Ch. W'ling'n & Zanes'ville	5.						
305,500					3d "	.....	"	25.		1,761,149.16	2,241,300.00	221,491.96		
540,000	6				Income.	.....	"							
43,000					Convertible.	.....	"							
400,000	7			1873	1st mortgage.	103 1/2	Cleveland Col. & Cin.	139	4,741,220		1	3,754	700,804	6 per cent.
				1864	2d "	85	Cleveland & Maconing..		1,500,000.00					
1,000,000	7			1873		52	Cumberland Valley..		1,218,394.00			160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	52	Dayton & Cin. short line.		1,000,000.00	1,000,000.00		655,578.79	288,078.84	\$234,133
350,000	7					93 1/2-10	Eastern Railroad..		3,343,000.00			30,597.20	19,692.30	
740,000	7				1st mortgage.	130	East Ten. & Virginia..		625,450.00					
88,000	10			1869	1st "	20	Essex Railroad..		700,000.00					
400,000	7			1861	2d "	109	Evansville & Crawf'd'ville		2,252,657.50			243,970.42	135,061.90	\$133,281.45
200,000	10			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.		3,540,000.00			681,162.52	213,837.81	3 per cent.
						33	Fox River Valley..		800,000.00					
100,000	6					35	Fair Haven Branch..		300,000.00			50,381.33	14,822.45	\$166,240.00
100,000	7				1st mortgage.	233	Georgia R.R. & Banking Co.		4,156,000.00		1,062,212.54	357,659.42		\$166,240.00
300,000	7				1st "	20	Grt Falls & Conway R.R.					27,376.69	14,207.07	
4,000,000	6 1-3			1858	1st "	281 1/2	Grt West'n R.R. of Con.		4,191,550.00		2,068,836.00			8 pr. ct.
2,000,000	7			1869-70	1st "	74	Housatonic Railroad..	24 1/2	2,000,000.00			339,196.50	176,529.98	
1,812,000	7			1860	2d "	144	Hudson River..		4,000,000.00		1,924,362.44		718,037.40	
12,885,000	7			1875	3d mortgage.	144	"		4,000,000.00					
4,115,000	6			1875	1st "	144	"		4,000,000.00					
3,000,000	7			1860	F. d.	99 1/2	Illinois Central R.R.	139 1/2	18,453,376.00		1,476,035.27	1031,459.08		7 pr. ct.
600,000	7			1860	1st mortgage.	64 1/2	"	704						
700,000	7	Nov. 1.			2d "	94	Indiana Central..	72 1/2				354,871.00		3 pr. ct.
50,000	7	Jan. & July 1		1862	1st "	80.	"							
700,000	7				1st mortgage.	.....	Iron R.R. ....	13	123,700.00					
						.....	Kentucky Cen. 2d Div..		712,500.00					
						.....	Knoxville & Kentucky..							
						.....	Laurens (S. C.) R.R.	32	166,000.00			23,233.59	14,233.59	
						.....	Louisville & Nashville..	184						
						.....	Lowell & Lawrence..	12 35	300,000.00			50,824.77	14,149.13	\$8,000
				1866	1st "	.....	Mad. River & Lake Erie..		2,697,090.00			587,236.57		10 pr. ct.
				1875	2d "	.....	"		2,697,090.00				162,277.50	
					1st "	.....	"		2,697,090.00					
				1868	1st "	50.	Manchester & Lawrence.	26	1,000,000.00					\$24,000
				1874	2d "	.....	Marietta & Cincinnati..	18 1/2						
				1867	1st "	.....	Mexican Gulf R.R. ....	27						
					1st mortgage.	.....	Milwaukee & Horicon..	30						
				1881	1st "	.....	Mineral Point R.R. ....	32						
				1-68	2d "	.....	"	32						
				1884	1st "	.....	"							
						.....	Mobile & Ohio..	497	10,000,000.00			231,495.96	162,802.24	
				1869	1st mortgage.	.....	Nashua & Lowell R.R. ....	15	600,000.00			194,752.42	55,501.74	7 pr. ct.
						.....	New Haven & North'n'n	55	932,500.00					2 pr. ct. 6m
				1864	Con. till 1859.	89	New York Central..	60 1/2	23,067,400	14,763,897		7,707,348	3,609,481	3 pr. ct. 6m
			N. York	1873	1st mortgage.	86 1/2	"	553						
				1864	2d "	79	N. Y. & Harlem R.R. ....	11 1/2	5,717,100.00			1,040,393.26		
				1863	1st "	.....	N. Y., Prov. & Boston..	50	1,58,000.00			245,713.00	64,678.71	\$37,692.30
					1st "	.....	N. Lon., William'tu & Pal.	66	1,700,000.00			120,571.50	51,544.40	
					2d "	.....	"							\$25,000
						.....	Pontchartrain R.R. ....	5	500,000.00					
						.....	N. O., Opelousa & Gr't West.		6,00,000.00			118,795.00	366,118.80	7 pr. ct.
				1873	1st mortgage.	.....	N. Y. & New Haven..	62 1/2	3,000,000.00		1,007,666.48			
				1873	2d "	103 1/2	North Western Va. R.R.							
				1-85	3d "	.....	"							
				1859	1st mortgage.	.....	"							
						.....	Northern (N. Y.) R.R. ....	118	2,000,000.00			600,000.00		7 pr. ct.
				1877	1st mortg.	.....	North Missouri R. ....	19 1/2				23,176.74	88,458.56	2 1/2 pr. ct.
				1860	"	.....	Norwich & Worcester R.R.	60	2,111,500.00			304,236.33		
						.....	"							
						.....	Ogd'sb'g, Clay't'n & Rome	94						
				1866	1st mortgage.	.....	Ontario, Simcoe & Huron	83 3	2,957,500.00			289,690.10	137,875.93	5 pr. ct.
				1875	2d mortgage.	.....	Orange & Alexandria R.R.					276,539.02		
				1868	1st mortgage.	.....	"							
				1873	1st "	.....	Peoria & Bureau Val. R.R.	47	1,500,000.00					6 pr. ct.
						.....	Philadelphia & Trenton..	28 1-5	1,000,000.00					
				1861	1st mortgage.	.....	Portsmouth & Concord..	47						
				1864 to 1874	1st "	.....	Potsdam & Watertown..	76	2,000,000.00					
						.....	Rutland & Washington..	62 1/2	950,000.00			68,525.42		
						.....	St. Louis & Iron Monn. R.R.	86	6,000,000.00					
						.....	Salem & St. Louis R.R. ....	168 3/2	400,000.00					
					1st mortgage.	.....	Snd'sky, Mans'fd & New'k	116					19,050.84	
					1st "	.....	Sullivan Railroad..	26	500,000.00			75,246.06		
					2d "	.....	"						17,378.08	
						.....	Tennessee & Alabama..	145				39,886.44		11m. 12 pr. ct.
					1st mortgage.	.....	Terre Haute & Richmond	73	1,294,450.00					
				1861	1st mortgage.	.....	Toledo, Wabash & Western	212	1,000,000.00					
				1840	2d "	.....	Troy & Boston..							
				1875	3d "	.....	"							
						.....	"							
					1st, 2d, 3d "	.....	Vicksburg & Jackson..	46					165,076.04	
						.....	Virginia & Tennessee..	215	3,000,000.00			322,048.60		2 pr. ct.
						.....	Westchester (Pa.) R.R. ....	31	165,000.00					
					1st mortgage.	.....	Wilmington & Manchester	171						
					2d "	.....	"							
						.....	Winchester & Potomac..	32						
						.....	Worcester & Nashua..	45 69.						



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

May 8th, 1857.		
Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858.	—	—
Ch. Ham & Dayton, 2d mort., .....	—	80
Detroit & Milwaukee, 1st mort., conv. till 1865.	64	66
Eric, 3d Mortgage, 1853.	82	84
" Sinking Fund, .....	81	83
" conv. 1862. ....	73	75
Grand Trunk (Canada) Debenture, .....	90	91
Great Western " conv., .....	116	121
" " non-conv., .....	105	107
Illinois Central, 1st Mort., 7's, .....	90	91
" " with option 70 per cent. ....	—	—
shares till Jan, 1858. ....	106	108
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent. ....	86	88
Little Miami 1st Mort. not conv. 6's. ....	—	—
Marietta and Cincinnati, 1st Mort., .....	—	—
Michigan Central, conv., 8's, 1860. ....	90 1/2	91 1/2
" do do 1869. ....	90	91
N.York Central. No Mort. Not conv., 6's	74	80
" " conv., 7's. ....	92	94
Ohio and Mississippi, 1st Mort., .....	—	—
Ohio and Pennsylvania, Income 1872. ....	68	70
Panama. No Mort. conv. 1866. ....	88	89
Pennsylvania, 1st Mort., conv., .....	91	93
" " Sterling, 2d Mort., .....	—	—
Stenberville and Ind., 2d Mort., .....	—	—

The quotations given are sterling quotations. The American values to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES,

AT THE STOCK BOARD,  
MERCHANTS' EXCHANGE  
AND AT PRIVATE SALE.  
BY HEWSON & HOLMES.  
For the week ending June 3, 1857.

BONDS.		
\$2,000 City of Frankfort, Ky., 6 per cent.		
Bonds, due in 1874. ....	66	and int.
3,000 do., do., do., .....	57	"
1,000 do., do., do., .....	58	"
3,000 Little Miami R. R. Co. 6 per cent		
1st Mortgage Bonds. ....	80	
1,000 Indianapolis & Cincinnati R. R.		
7 per cent. 2d Mortgage Bonds. ....	80	
6,000 Covington & Lex. R. R. Co. 7 per		
cent. 2d mort. Bonds. ....	66	
2,000 Ohio & Mississippi R. R. Co. 7 per		
cent. 2d mort. bonds. ....	60	
3,000 Cincinnati, Ham. & Dayton R. R.		
Co. 7 per cent. 1st Mort. Bonds. ....	87 1/2	"
1,500 Columbus & Xenia R. R. Co. 7 per		
cent. Dividend Bonds of 1860. ....	88	
2,000 City of Wheeling 6 per cent. Bonds		
1,000 City of Cincinnati 6 per cent. Bonds		
380 Little Miami R. R. Scrip. ....	82	
STOCKS.		
200 Shares Ohio & Miss. ....	11 1/2	
300 " do do ....	12	
500 " do do 30ds. ....	12 1/2	
100 " do do cash. ....	12 1/2	
236 " Marietta and Cin. ....	19	and int.
150 " do do 60ds. ....	20	"
60 " Indianap. & Cin. ....	63	
20 " Cin., Ham. & Dayton. ....	68	
50 " Cincinnati & Chicago. ....	2 1/2	"
24 " Cov. & Lexington. ....	18 1/2	"
190 " Ohio Central. ....	15	"
400 " Southern Pacific. ....	\$3 50	for \$5 paid.
10 " Ohio Life Ins. & Trust Co.		
Bank. ....	100	
5 " Farmers' Bank Ky. ....	120	
7 " Northern Bank of Ky. ....	120	

## MONETARY AND COMMERCIAL.

Since our last we have noticed a more quiet tone in the market for money than we have seen for some time. The demand is naturally reduced, although the supply is by no means increased. The favorable prospects for the crops throughout the country is having its effect, and great confidence is felt in the soundness of our condition commercially and financially. The regular houses are supplying the wants of their customers at 10 to 12 per cent.

Business is not brisk in any department. Manufacturers, especially, are not hurried. Building is the only branch of industry that seems to be very active.

There is but little doing in stocks, and not much speculative feeling. There appears more a tendency to real estate investments than stock securities, although but little capital is seeking investment.

At the East we notice a favorable state of things. Money is quoted easy at the banks at 7 per cent. The transactions in stocks are for large amounts and at varying figures. Erie is quoted as low as 35 1/2. There seems

to be no tendency to speculative investment in this variety.

We subjoin our usual quotations from Hewson & Holmes:

In consequence of the extensive preparations in progress during the past week for the opening celebration of the three great roads—Ohio & Mississippi, Marietta & Cincinnati and North-Western—very little business has been transacted; but more, perhaps, in stocks than in any other department of trade, as our list will show. The sales will average very nearly the usual amount, and will not vary in price enough to particularize, except in one or two instances. We notice an advance in Ohio & Miss. shares of 1/2 to 1 per cent., and in Covington & Lexington second mortgage bonds of 1 per cent. on the previous week.

Exchange on the East continues firm at 3/4 to 1 per cent. No change in New Orleans.

SALES AT THE NEW YORK STOCK BOARD—May 30.	
\$3,000 Tenn. State 6's, '90. ....	86 1/4
12,000 Missouri State 6's. ....	83
1,000 Louisiana 6's. ....	85
2,000 California 7's, 1875. ....	63 1/2
2,000 Virginia 6's. ....	91 1/2
2,000 Indiana State 5's. ....	83
1,000 Hudson Riv. R. R. 2d Mortgage Bonds. ....	59 1/2
500 Illinois Central R. R. Bonds. ....	99 1/2
7,000 Illinois Cen. Freedland Bonds, with priv. ....	94
1,000 Lake Erie W. 1st Mortgage. ....	64 1/2
2,000 N. Ind. 2d Issue Bonds. ....	77
25 shares Pacific Mail St. Co. ....	71
400 " New York Central. ....	86
400 " Erie. ....	33 1/2
250 " Harlem R. R. stock. ....	11 1/2
160 " Mich. S. & N. Ind., se. stock. ....	86 1/2
100 " Reading. ....	80 1/2
100 " Nor. and Wor. R. R. ....	20
200 " Illinois Central. ....	139 1/2
20 " LaCrosse & Milwaukee. ....	76
550 " Mich. S. & N. Ind. ....	58 1/2
5 " do p. stock. ....	66
200 " Cleveland & Pittsburg. ....	48 1/2
5 " Cleve., Col. & Cin. ....	103 1/4
100 " Galena & Chicago. ....	95 1/2
180 " Cleveland & Toledo. ....	63
150 " Chicago & Rock Island. ....	96 1/2
10 " Milwaukee & Miss. ....	67

## LAW RELATIVE TO R. R. BONDS,

Passed by the Thirty-sixth Legislature of the State of Maine:

AN ACT providing for the foreclosure of certain mortgages given to secure the payment of bonds and coupons issued by railroad corporations.

Be it enacted by the Senate and House of Representatives in Legislature assembled, as follows:

Sec. 1. Whenever a railroad corporation shall have mortgaged its railroad and franchise to secure the payment of any of its bonds or coupons, whether such mortgage was made directly to the holders of such obligations, or to trustees for their use, the refusal or neglect to pay any such bond or coupon within ninety days after a presentment (subsequent to its pay day) to the Treasurer or President for payment, shall be deemed a breach of the condition of the mortgage.

Sec. 2. Upon the breach of such condition it shall be the duty of the trustees to call a meeting of the holders or owners of bonds secured by the deed creating such trust, any of whose bonds or coupons have been dishonored, by giving public notice of the time and place of such meeting, three weeks successively, in the newspaper published by the State printer, and in some newspaper published within the county in which the road extends—the last publication to be at least one week before the time of such meeting. The bondholders assembled at such meeting shall have the power to organize, by the choice of a moderator and of a clerk, and to determine in regard to the expediency of the trustees entering into possession of such road for the purpose of running and managing the same on their behalf. At such meeting each holder of a bond secured by the mortgage, either in person or by proxy, shall have one vote for every hundred dollars of bonds held or represented. It shall be the duty of the trustees (provided they shall be so instructed by the holders of the bonds secured by the mortgage), and they are hereby authorized, when not inconsistent with any of the provisions of the deed creating the trust, or the legal rights of any other parties, upon its being proved to them that the coupons or bonds secured in the mortgage to them have been and remain dishonored, without further process, or by action at law, to enter upon and take possession of such road, and of all the rolling stock and other property covered by the mortgage, and applying the net proceeds of the earnings thereof according to the legal rights of the parties in interest. And such trustees are hereby authorized, as fully as a Board of Directors of said road for the time being, to take charge of and manage said road, to appoint the requisite officers and agents, and to discharge the same, to fix the rate of fare

and tolls subject to the restriction of the charter of said railroad company, and to demand and receive the same, and to do all things in the management of said road that a Board of Directors might lawfully do, with the right to prosecute and defend suits in their name as trustees, and to do all other things which the corporation itself might legitimately do. It shall be the duty of the trustees, after paying the running expenses, to apply sufficient of the earnings to keep the road, its buildings and equipments in repair, and prevent any deterioration thereof, and to provide such new rolling stock as may be necessary, and then to apply the residue according to the legal rights of the parties having claims against such road. And said trustees shall not be personally liable, except for malfeasance or fraud; provided, however, that the funds in their hands, or in the hands of their Treasurer (who shall be required to give bond for the performance of his duties), shall be subject, after payment of prior running expenses and personal liabilities assumed by any of the trustees on account of operating said road, to the payment of such damages as shall arise from any malfeasance in the management of said road. And when all dishonored bonds and coupons secured by the deed in which the trust is created shall have been paid, said trustees shall surrender said road and other property to the parties who by law are entitled to receive the same. It shall be the duty of said trustees to cause a fair and exact account to be kept of the receipts from said road and expenses and disbursements in the management of the same, and to exhibit the same to any officer of the corporation or other person interested, whenever requested so to do. While managing any railroad, as provided in this section, they shall once in each year, and at other times when requested so to do, in writing, by the holders of one-fifth of the bonds in amount secured by the mortgage, call a meeting of the holders of said bonds, by giving such notice as is prescribed in the by-laws of corporation for calling meetings of the stockholders thereof, and report to them the state of the property, the expenses of the management thereof, and the application of the earnings made by them. At such meetings the bondholders may vote such instructions to the trustees as they may deem advisable; and, if not inconsistent with the duties prescribed in the deed of trust or contrary to law, said trustees shall conform to such instructions in the execution of the trust. At such meetings they may act on such questions as shall be specified in the call of the meeting. They may also prescribe the compensation of the trustees. At all such meetings the bondholders may act and vote either in person or by proxy, and each one hundred dollars of the bonds shall be entitled to one vote. On being instructed so to do by the holders of the bonds secured by the mortgage, at any meeting held or called as aforesaid, the trustees may, and it shall be their duty to, contract with the Directors of the corporation, or with any other competent party, to take charge of, manage and operate said road so long as the trustees may rightfully retain possession thereof, and to pay over to the trustees the net earnings of said road for the benefit of the bondholders.

Sec. 3. In order to obtain a foreclosure of the mortgage, the holders of any such dishonored bonds or coupons may apply to the trustees under the deed securing the same, to have such mortgage foreclosed; and it shall be the duty of such trustees, upon application of bondholders to an amount equal to one-third of the amount of such mortgage, immediately to give public notice three weeks successively, in the newspaper published by the State printer, and in a newspaper published in each of the counties in which said road extends, if any shall be published therein, stating the date and conditions of the mortgage, and the claim of the applicants under it, and that the conditions thereof have been broken, by reason whereof they claim a foreclosure; and they shall cause a copy of such printed notice, and the name and date of each of said newspapers containing it, to be recorded in each of said counties, in its registry of deeds, within sixty days from the time of the first publication. And, unless within three years from the time of such first publication the property shall be redeemed by the mortgagors or persons claiming under them, the right of redeeming shall be forever foreclosed, unless some bill in equity to redeem, founded on payment, or on an adequate and sufficient tender of the amount of the over due bonds and coupons secured by said mortgage, had then previously been commenced.

Sec. 4. Upon the completion of such recordings, the procedure for foreclosure shall inure to the benefit of all the holders of any such bonds or coupons, which, at the time of such completion, had been dishonored as above described; and it is only upon the payment or tender of payment of all such bonds and coupons, that the foreclosure shall be prevented; provided, that tender may be made to the trustees at any time after the notice, and before the foreclosure shall become absolute; and it shall be the duty of the holder of such dishonored bond or coupon, to present them to said trustees thirty days before the time of redemption shall expire, and such mortgage shall not be foreclosed by reason of the non-payment of any not so presented. Any person claiming under the mortgagors shall have free access to the books of the corporation to ascertain the amount of the over due bonds and coupons remaining unpaid.

Sec. 5. If the foreclosure of the mortgage be effectuated, it shall inure to the benefit of all the holders of bonds and coupons provided for in its condition. And they, their assigns and successors, are hereby constituted a company, incorporated and chartered as of the day of the foreclosure, for all the purposes of the original company, with all the chartered and legal rights and immunities, which pertained to the original company of the time of the foreclosure; and it shall be the duty of the trustees, by suitable deed of release, to convey to such new company all the rights and



interest by them held in said railroad, appurtenances and franchise, and other property, by virtue of their deed of trust, and the foreclosure thereof, and if they neglect or refuse so to do, the court, upon the application in equity, shall have power to compel them so to do, and upon such conveyance, the said trustees shall be discharged of their trust.

Sec. 6. This new corporation, though a distinct one, may, for the calling of its first meeting, retain the same name with the old one; but shall at that meeting adopt a new corporate name, such as it shall choose to take, by which name it shall always afterwards be known. Its first meeting may be called in the same manner as was authorized for calling the first meeting of the original company. And the new corporation shall have the full right to take and retain the possession and use of the mortgaged property, notwithstanding the pendency of any bill in equity to redeem.

Sec. 7. Upon the hearing of any bill in equity to redeem, commenced as mentioned in the third section, the new corporation may become a party and defend; and the court, if the bill be sustained by the answer, and proofs or otherwise, may decree a redemption and a return of the property, on such terms and conditions as equity may require, giving such effect, as to rents and profits on the one hand, and as to necessary expenditures on the other, as pertains in equity to the redemption of mortgaged lands; and may effectuate its decrees by all needful warrants and processes.

Sec. 8. The original corporation shall continue in existence for the sole purpose of collecting and paying its debts, and bringing its unsettled matters to a close. The foreclosure of the mortgage and consequent transfer of the mortgage property, as above provided for, shall not impair the rights of recovery after the corporation or its stockholders, which any person may have, either on contract or other cause of action. But in suits founded upon any of the bonds or coupons, secured by the foreclosed mortgage, the actual value of the proportionate part of the property, which passed by the foreclosure, shall be deducted.

Sec. 9. Proceedings under this act for the foreclosure of a subsequent mortgage shall not impair the rights of any party, claiming under a prior mortgage. The new corporation resulting from the foreclosure of a subsequent mortgage shall have all the rights of redeeming against a prior mortgage, and to the same extent, by bill in equity or otherwise, which the holders of the bonds and coupons secured by such subsequent mortgage, or their mortgage-trustees for them, could have had.

Sec. 10. Without impairing the rights of parties who shall see fit to enforce them at law, the supreme judicial court, as a court of equity, shall have jurisdiction of all matters arising under the provisions of this bill, to be presented and acted upon as other questions arising in equity in this state.

Sec. 11. This act shall take effect and be in force from and after its approval by the governor.

Approved April 15, 1857.

## Inventor's Manual.

Compiled expressly for the Railroad Record, by Geo. H. KNIGHT & BRO., Solicitors of Patents, Cincinnati, Ohio, and Washington, D. C.

1. A PATENT for fourteen years, is granted to the first inventor of a new and useful Art, Machine, Manufacture or Composition of Matter; not heretofore known in this country, nor published or patented in any foreign country. Patent office fee, \$30.—Act 1836, Sec. 6—7.

2. A CAVEAT is useful as a precautionary step, in cases where the inventor requires further time or means to mature his invention, and entitles the party (for a year) to notice of any interfering application subsequently filed. Gov. fee \$20.—Act 1836, Sec. 12.

3. APPLICATION for Letters Patent, should be made within two years after the first sale, or public use of the invention—and must be accompanied by a Model (where the case admits of one), or a Specimen of Ingredients and Composition; also Petition, Oath, Duplicate Drawings, Specification, and Fee, (\$30).—Act 1836, Sec. 6; Act 1839, Sec. 7.

4. MODELS are required to be neat and substantial, not exceeding 12 inches in length or width, fastened by other means than gluing, and marked with the inventor's name.

5. DESIGN.—A patent for seven years, is allowed to any citizen of the United States, who originates a new carving or sculptural composition, or a new shape or configuration of any article of manufacture, or a new, ornamental, or useful design, pattern or picture, to be worked into, or printed, or painted, or cast, or otherwise attached to any article of manufacture. Gov. fee, \$15.—Act 1842, Sec. 3.

6. REISSUE.—Patents with defective specifications, may be reissued in an amended form. Gov. fee, \$15.—Act 1836, Sec. 13.

Where, by inadvertence, accident, or mistake, the original patent is too broad, a disclaimer may be filed either by the original patentee, or by any of his assignees. Fee \$10. Act of 1837, Sec. 7.

7. ADDITION.—The original patentee [inventor 3 Story, 171—173] may procure an addition to be made to the patent of an improvement made by him subsequently to the original grant. Gov. fee, \$15.—Act 1836, Sec. 13.

8 EXTENSION.—Application for extension must be made at least three months prior to the expiration of a patent. The chief points to be established are: 1st, ascertained value of the invention; 2d, account of loss and profit which has accrued from the invention; 3d, efforts made and difficulties incurred in maturing and introducing the invention. Gov. fee, \$40.—Act 1836, Sec. 18; Act 1848, Sec. 1.

9. If a recent rule of the Patent Office, two or more machines are not allowed to be the subject of one patent, even although used to make a single article.

10. The heirs of a deceased inventor, are entitled to apply for and receive a patent.—Act 1836, Sec. 10.

11. The application must in all cases be made by the inventor—if alive.—Act 1836, Sec. 6.

12. Joint Inventors are entitled to a joint patent, but neither can claim one separately.

13. Assignment may be made previously to application.

14. A patent may be issued to an assignee, or to a co-inventor, but not jointly to an assignee and inventor as such, but by suitable assignment, can be issued to them as joint assignees.

15. Residence in U. S. for entire year next preceeding application, and declaration of intention to become a citizen, entitle a foreigner to claim a patent on the same terms as a citizen.—Act 1836, Sec. 9.

16. Assignments should be recorded, within three months—recording fee, \$1, \$2, or \$3.

17. The specification must set forth the invention in such full, clear and exact terms, as to enable one skilled in the art to which it appertains to compound and use it without making any experiments of his own.—5 Howard, 4.

18. A construction of patents liberal for the patentees is proper: but the description of the patent must be so certain as to be understood by those acquainted with the subject matter.—1 Wood, 53.

19. A deviation from the precise dimensions shown by the specification and model, so as to make different parts work together, is within the knowledge of any workman. *Webb, pat. cas. 176.*

20. The omission to mention in the specification anything which the patentee knows to be necessary for the beneficial enjoyment of the invention, is a fatal defect; but the omission to mention something which contributes only to the degree of benefit, provided the apparatus would work beneficially and be worth adopting, is not a fatal defect.—*Webb, pat. cas. 517.*

21. The language of the specification is necessarily that of the factory, the technical terms and expressions of the workshop must be used in order to a workman understanding the description of a patented invention, and these are often wholly incomprehensible to a judge and to other legal men until they are explained.—*Corp. pat. cas.*

22. If an inventor (before application for patent) knowingly suffers his invention to go into public and general use without objection, it is a dedication of it to the public. 4 Mason, 108.

23. No patent is held to be invalid by reason of the purchase, sale, or use prior to the application for a patent, except on proof of abandonment of the invention to the public; or that such purchase, sale or prior use, has been for more than two years prior to such application for a patent.—Act 1839, Sec. 7.

24. Patentees, or their assignees are required to affix the date of the patent to each article vended or offered for sale, under a penalty of not less than one hundred dollars, and the same penalty is incurred by marking with the word "patent," or like phrase, an unpatented article.—Act 1842, Sec. 5 and 6.

The law says "the article or articles shall be stamped or engraved with the date of the patent." The date does not mean the year nor the month on which the patent was granted, but the day, for the patent goes into effect from the day it was issued, and ceases to be effective on the very day—not the year—it expires.—*Bells, J., N. Y., May 6, 1856.*

When the article is of such a nature, that the name of the patentee cannot be printed thereon, it should be affixed to the case or package containing it.—*Rep. Comm'r Patents, 1851.*

25. It is incumbent upon the plaintiff to show that the defendant has sold or used for profit an article, substantially resembling the one for which he, the plaintiff, has obtained his patent.—4 Wash. C. C. 71.—1 Wood, 248.

26. It is incumbent upon the plaintiff to show that the infringement took place after the date of the patent.—4 Wash. C. C. 72.

27. If the defendant relies upon a prior description in some public work, he must produce a work containing such a description as would be sufficient in a patent.—*McLean, Nov. 1849.*

28. Sometimes, as a farther means of doing justice between the parties, upon the question of infringement, when an action at law is to be tried, the court will order a mutual inspection of the plaintiff's and defendant's works.

The object in so doing is to enable the parties on the trial, to give such evidence as will tend to prove or disprove the fact of infringement. For this purpose inspectors or viewers are appointed, under the direction of the court, who are to be admitted as witnesses on the trial at law. If the parties do not agree on the persons to be appointed, the court will appoint them.—*Webb, Pat. cas. 168.*

29. The question of identity or dissimilarity, is for the jury.—4 Wash. C. C. 543.

30. Proof of undisputed possession and use of the patent right for reasonable length of time or recovery of judgment in a previous suit, is ground for granting an injunction.—1 Woodbury 13.

31. The account and the injunction will extend to all the articles piratically made during the existence of the patent though some of them remain unsold.—*Webb, Pat. Cas. 119.*

32. One who improves upon an original patent, has no right to use the original, nor has the original patentee a right to use the improvement without license.—1 Peters, C. C. 399.

33. Mere colorable differences, or slight improvements, cannot shake the right of the original inventor.—2 Gall. 54.

34. Where the claim is for a combination, the use of any number of parts less than the whole, is not an infringement.—3 McLean, 454.

35. The product of a patented machine is not patent property.—3 McLean, 296-7.

36. It is an infringement of a patent, to make the thing patented, although done at the request of another.—3 McLean, 283.

37. The use of a machine under a license, upon failure of the conditions imposed, becomes an infringement.—3 McLean, 226-9.

38. The recovery of damages against a trespasser is no

bar to another suit, if he continues the trespass.—4 Mason, 13.

39. The sale of the materials of a patented machine by the sheriff, on an execution against the owner, does not subject the officer to action for infringement—he cannot guarantee the right to use, nor does it pass.—1 Gall. 455.

40. INTERFERENCE.—An appeal is given to a disappointed applicant, because otherwise the decision of the Commissioner would be conclusive against him. It is not given to the patentee because the decision of the Commissioner is not only not conclusive as to him, but does not in any manner affect his legal or equitable rights.—*Cranch, Nov. 21, 1842.*

41. There is nothing in the laws relating to the Patent Office, or in the rules adopted by the Commissioner, to prevent him from postponing the hearing of a cause, if in his opinion the justice of the case should require it, and especially for the correcting of an irregularity in matters of form. To deny him this power, would be to stifle justice in her own forms.—*Cranch, March 27, 1843.*

42. In the case of two or more inventors, he who invents first, has the prior right, if he had reduced the invention to a practical form by drawing or otherwise, and has used reasonable diligence in adapting and perfecting it.—1 Story, 590—595.

43. Reducing to practice differs from bringing into use. There is no law requiring the applicant to reduce his invention to actual use, before he can obtain a patent. An inventor has reduced his invention to practice, when he has so described it upon paper—with such drawings or model as to enable any person skilled in the art to make and use the same. He must show that it is practicable, and the manner in which it may be used.—*Cranch, July 7, 1847.*

44. There is no doubt that he who has discovered some new element or property of matter, may secure to himself the ownership of his discovery, so soon as he has been able to illustrate its practicability, and to demonstrate its value. His patent, in such a case, will be commensurate with the principle it announces to the world, and may be as broad as the mental conception itself. But the mental conception must have been susceptible of embodiment, and must, in fact, have been embodied in some mechanical device, or in some process or art. The abstract must be resolved into the concrete. The patent must be for a thing, not for an idea merely.—*Kane J. U. S. D. C. Pa.*

45. The invention itself is an intellectual process or operation, and like all other expressions of thought, can in many cases scarcely be made known except by speech. \* \*

\* \* The conversations and declarations of a patentee merely affirming that at some former period he invented that particular machine, might well be objected to, but his conversations and declarations stating that he had made an invention, and describing its details and explaining its operations, are properly to be deemed an assertion of his right, at that time, as an inventor to the extent of the facts and details which he then makes known. \* \* The invention may be consummated and perfect, and susceptible of complete description in words, a month or even a year before it can be embodied in any visible form.—14 Peters, 462.

46. Every patent is a monopoly; and nothing can justify it but the natural right of property which a man has in the products of his own labor and ingenuity.—*Cranch, 22 May, 1841.*

47. A patent is not to protect a monopoly of what existed before, and belonged to others, but to protect something which did not exist before, and which belongs to the patentee.—1 Wood, 53.

48. The right to the patent belongs to him who is the first inventor, even before the patent is granted; and, therefore, any person who, knowing that another is the first inventor yet doubting whether that other will ever apply for a patent, proceeds to construct a machine, of which it may afterwards appear he is not the first inventor, acts at his own peril, and with a full knowledge of the law, that by relation back to the first invention, a subsequent patent may cut him out of the machine which he has erected.—2 Wash. C. C. 345.

49. If the invention be new and useful to the public, it is not material whether it be the result of long experiments and profound research, or whether of some sudden and lucky thought or mere accidental discovery. Luck, labor, or inspiration, gives an equal right.—*Tindall, C. J. 1 Webb, Rep. 393.*

## J. T. CRAFTSEY, ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

G. W. MORRILL. G. B. BOWERS.

## MORRILL & BOWERS,

Successors to and members of the late firm of  
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

## Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases, apl6



**GENERAL**  
**RAILWAY SUPPLY AGENCY.**  
**SNOOK & HILL'S PATENT**  
**LOCOMOTIVE LAMPS,**  
 83 Liberty Street, Cor. of Broadway,  
 NEW YORK.

**JOHN W. KELLY,**  
**MANUFACTURERS' AGENT,**

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**

**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

**BUSH & LOBDELL**

Wilmington - - - - - Delaware.

MANUFACTURERS OF

**CHILLED WHEELS**

AND

**TIRES,**

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extant

FOR THEIR

**CELEBRATED WHEELS,**

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

**WHEELS FITTED**

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

**Most Reasonable Terms.**

ap23

**TO PRINTERS.**

**Large Cylinder Hoe Press**  
**FOR SALE.**

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once.

Address

WRIGHTSON & CO.,  
 167 Walnut street, Cin'tl, Ohio.

N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.

ap8-1m

W. & CO.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas filters and mathematical and optical instrument makers. They are the only forges made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN,  
 41 East Second street, Cincinnati, O.

ap23

**Railroad Iron.**

**2000 TONS RAILS,** Erie pattern, weighing about 56 lbs. per yard, in port and to arrive; for sale in lots to suit purchasers, by

my8-1m

M. K. JESUP & CO.,  
 44 Exchange Place, New York.

**FOR SALE.**

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

ap8-1m

WRIGHTSON & CO.,  
 167 Walnut street, Cin'tl, Ohio.

**SILVER, GOLD, LEAD,**

And Other Minerals.

ON THE PROPERTY OF THE  
**Sonora Exploring and Mining Co.,**

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arizaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matters so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
 Odd Fellows' Building,  
 mar26 Cor. Third and Walnut streets, Cin'tl, O.

**Norris' Locomotive Works.**



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

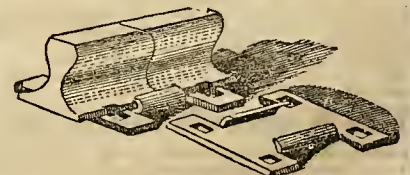
**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

ly 27.

RICHARD NORRIS & SON.

**RAILROAD SPIKES.**



**WROUGHT IRON**

**Chairs and Fastenings.**

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

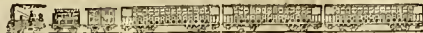
The best quality of refined iron is used, and all orders filled with dispatch.

J. HOPKINSON SMITH  
 No. 25, South Charles

Please direct the name in full.  
 Baltimore August 31-7



## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest, and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup't.  
Racine, May 15, 1857.

H. S. DURAND, President,  
my21

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience is car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

cc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Is engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order of a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut Street, Cincinnati, Ohio  
Feb 7 LEE & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
Louisville and Frankfort Railroad.

ajr2

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan-ry] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St., PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns.

Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do.,

Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

ORDERS SOLICITED AND PROMPTLY FILLED.  
oc23-ly

## E. MENDENHALL, MAP, BOOK & PRINT SELLER,

Has constantly on hand GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES, DRAWING INSTRUMENTS, &c.

Publisher of the Railway Map of the Western States, In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON CO. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA  
MAPS OF EVERY DESCRIPTION.  
mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

Lathe Mandrels, Gauges of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also, be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,  
15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, or commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOT E METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles CHAS. W. COPELAND,  
Consulting Engineer,  
64 Broadway, N. Y.

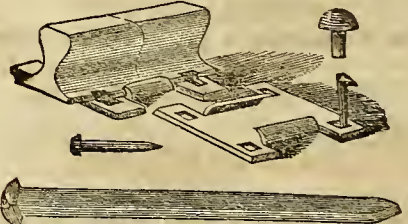
Nov

W. G. ATKINSON,  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.  
mar-ly

## GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.  
feb 25 COREY, GOSSIN & Co.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177; Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:02 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

cc23-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,  
PITTSBURGH,  
DUNKIRK,  
BUFFALO  
NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

FOR TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Clin. and St. Louis Omnbuses L  
Office No. 2 Burnet House.

Jan 2

1856.

1857. Spring Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD.

FOR THE

## NORTH, EAST, AND WEST. FOUR DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:15 and 8 A. M., 2:10, and 5:30 P. M.

## FIRST TRAIN.

Indianapolis Express, at 5:15 A. M., for St. Louis, Chicago, Galena, Rock Island, Terre Haute, Dubuque, St. Paul, and all the principal cities and towns North, South and West of Indianapolis.

Passengers can now go by this route with far more comfort and safety than by any other, and through in as quick time.

## NO CHANGE OF CARS AT HAMILTON.

Baggage checked to Indianapolis, St. Louis and Chicago.

## SECOND TRAIN.

Cleveland and Pittsburgh Express, at 8 o'clock A. M., connects at Urbana with Columbus and Piqua trains East and west; at Bellefontaine for Crestline, at Sandusky for Toledo and Chicago going west, and at Clyde or Sandusky for Cleveland, going east, running into the C. C. & C. LAKE SHORE DEPOT, avoiding any ferrying or omnibus riding, and connecting at Cleveland with

## LAKE SHORE TRAIN,

For Dunkirk or Buffalo, to New York, Detroit, Niagara Falls, and all the Eastern cities. Also connects at Sandusky with

## "TEAM BAY CITY,"

at 6:20 P. M. for Detroit.

This is the only direct route to Detroit.

Same train connects at Dayton with Dayton & Michigan Road to Troy, Piqua, Sidney, &c. Also, with Greenville & Miami Road to Greenville, Union, and all points on the Bellefontaine Road; and at Hamilton with Western Stage Co.'s four horse Coaches for Oxford, Liberty, Brownsville, Connersville, &c.

## FARE AS LOW AS BY ANY OTHER ROUTE.

Baggage checked to Cleveland, Dunkirk, Buffalo and Pittsburgh.

## THIRD TRAIN.

At 2:10 P. M., for Indianapolis and Dayton, connecting at Hamilton for Eaton and Richmond; through to Indianapolis direct, there connecting with night trains for St. Louis, Chicago, &c.

Connects at Dayton with train for Troy, Piqua, Sidney &c. Also, with train on Mad River Road for Springfield, Urbana, Bellefontaine, Huntsville, and intermediate points.

## FOURTH TRAIN.

At 5:30 P. M., for Sandusky, Cleveland, Pittsburg, Fort Wayne and Chicago, connecting at Forest direct for Ft. Wayne, Chicago, &c.; arriving at Fort Wayne at 6:20 A. M., and Chicago 2:00 P. M., also connects at Forest for Pittsburgh Philadelphia, &c. Same train connects Sandusky for Cleveland, New York, Boston, &c.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

## RETURNING TRAINS

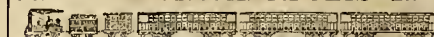
Leave Hamilton at 7:15 and 9:50 A. M., 12:05 P. M. and 6:50 P. M.

Leave Dayton at 5:30 and 8:20 A. M., and 5:30 P. M. For further information and Tickets, apply at the Ticket Offices; on Walnut street, near Fourth, or at the South-East corner of Fourth and Vine streets or the Sixth Street depot.

IRA WOOD, Master of Transportation.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices. dec21

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

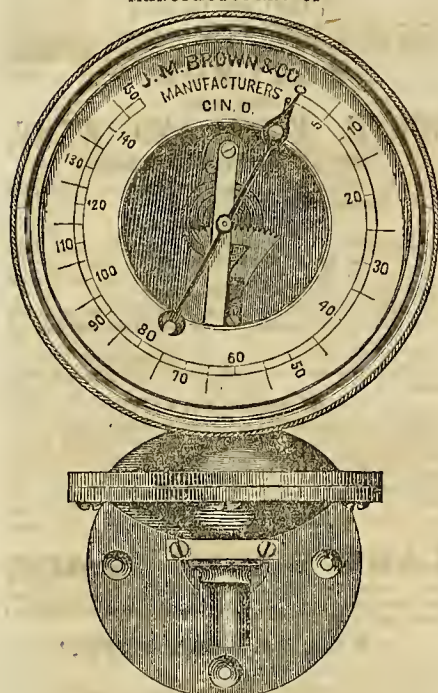
L. N. ANDREWS, Gen. Frtght. Ag't.  
Indianapolis, Sept. 16, 1856.

[mh29-1y.



**J. M. BROWN & CO.,**

MANUFACTURERS OF



### IMPROVED Corrugated Steel Spring Gauges,

FOR

**LOCOMOTIVES AND STATIONARY ENGINES.**

**T**rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

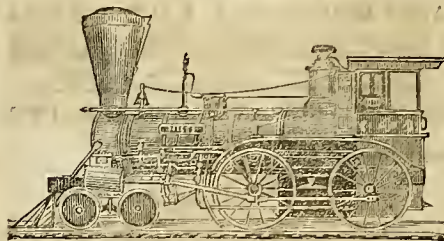
Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

m mar 26 250 East Front street, Cincinnati, O.

**LOCOMOTIVE WORKS.****NILES & CO.,**

CONGRESS STREET, CINCINNATI.

**B**UILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for Iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

**RAILROAD IRON.**

**T**HE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON &amp; CO.

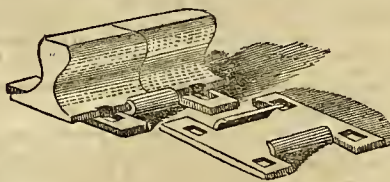
New York, Ap 3, 1856. 9 South William Street.

**A. B. LATTA'S****Patent Mercurial Steam Gauge,**

**H**AS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

J. B. GREEN,

A. B. & E. LATTA.  
C. S. GREEN.**CINCINNATI RAILWAY****CHAIR WORKS,**

ESTABLISHED JAN., 1852.

south Side Congress St., East of Canal, CINCINNATI, OHIO.

J. B. GREEN &amp; BRO. PROPRIETORS,

**W**E have in use improved machinery, capable of turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

**Wrought Iron Chairs.**

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.  
Feb. 14 1y.

J. B. GREEN &amp; BRO.

**THE SCHENCK  
MACHINERY DEPOT**

AND

**Leather Banding Manufactory,**No. 163 GREENWICH STREET,  
NEW-YORK.

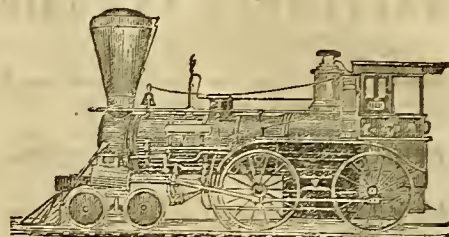
**K**EEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Up-right Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

**Oak-tanned Leather Belting,**

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

**CINCINNATI  
LOCOMOTIVE WORKS.**

**T**he undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap. 20

MOORE &amp; RICHARDSON.

**Railroad Car Findings**

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

**Wheels & Axles, Jaws, Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,**

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS.**

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimnings for windows and Seats. Varnish, Coach Japan and Glue, Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

**ALBERT BRIDGES,**

Late Davenport &amp; Bridges, Car Manufacturers.

Cambridgeport, Mass.

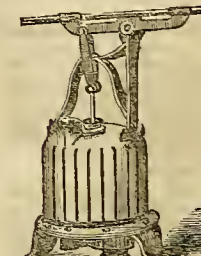
**ALFRED BRIDGES,**Late Davenport, Bridges & Co., Fitchburg, Mass.  
foc6.**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**

**W**OULD respectfully invite the attention of RAILROAD Companies, Manufacturers, Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thanfully received and promptly filled at the shortest notice.

**SILVER MEAL.** (The highest prize) awarded to these pumps a team Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855. 1



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

**DRILL THE TUBE-PLATES**

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Ties, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

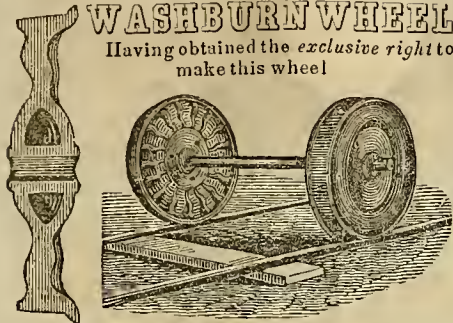
**THOMAS PROSSER & SON,**

82 PLATT STREET, New York.



### FULTON CAR WORKS, CINCINNATI, OHIO.

The Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



#### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

#### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

#### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

#### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

### Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of Dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16\* **JOSEPH DAVENPORT.**

### S. C. THOMSON & CO MANUFACTURERS OF

### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Car Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j **NEWARK, N. J.**

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855.**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-1y 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

### ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
**LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,**  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '55] 3 College Hall, Cincinnati O.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July31

**THOMAS D. STETSON,**  
**Mechanical Engineer,**  
AND  
**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.  
Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc22

### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

**P. DUDLEY,**  
aug14-1y President of the Board.

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 52 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** feb19-1m 9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** no13 10 Wall st., near Broadway, New York.

### IRON BOILER FLUES, PASCAL IRON WORKS.

**MORRIS, TASKER & CO.,**  
Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

**Warehouse, 85 South Third St.,**  
**PHILADELPHIA.** [aug

**RAILROAD IRON.**  
**LOCOMOTIVES.**  
4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

**M. H. GOODMAN & CO.,**  
Feb. 7. '56-2m. [ no. 7 Wall st., N.

### RAILROAD CAR

AND  
**COACH TRIMMINGS.**  
**DOREMUS & NIXON,**

No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**

### IMPORTERS OF

**Plain and Figured Mohair Plush;**  
Printed & Unrent do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Enameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width;**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT,**  
**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in bond for exportation. sepl8 **DOREMUS & NIXON**

### RAILROAD RECORD,

**BOOK & JOB PRINTING OFFICE;**

**167 WALNUT STREET,**

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,  
**RAILWAY AGENTS**  
AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, JR.,

dec11 Second avenue, corner of 2nd street, N. Y.

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

**RAILROADS, STEAMBOATS,**  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened; the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY &amp; BROTHERS,

dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building

**The Great Arnold Secret Discovered at Last**

**BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**



edgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton &amp; Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 30 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

ANDERSON, GATES & WRIGHT,  
**STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,**  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,**  
Iron Founders & General Machinists,

**ARE** prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap23

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C.

april2

**Thorough Bred Stock FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES."

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JUNE 11, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS PER ANNUM, IN ADVANCE.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	60 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers, and Proprietors,

### CONTENTS.—NO. 16.

#### EDITORIAL.

The Industrial Development in its relation to Railroad Traffic.....	253
The great opening of the Ohio and Mississippi Railroad.....	254
Brevities.....	255

#### RAILROADS.

New Albany and Sandusky City Junction R. R.....	256
The Sabine and Galveston Bay Railroad.....	257
The Grand Rapids and I. R. R. Co.....	257
Rock Island Bridge.....	258
Railroad Meeting.....	258
Railroads in the State of Maine in '56.....	258

#### MISCELLANEOUS.

Ventilation of Mines.....	259
Business of the Sault Ste. Marie.....	259
Safety of Passengers.....	261
Lake Superior Mining Matters.....	261
Improvement in the Manufacture of Iron.....	261
The French K. R. Fraud.....	262
Mobile Girard.....	261

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	260
London Quotations.....	261
Monetary and Commercial.....	261
Sales at the New York Stock Board.....	261

#### —MINNEAPOLIS & CEDAR VALLEY R. R.

—The grant of land for building a railroad from Minneapolis and St. Paul, *via*, Faribault, to the Iowa line, has been assigned to the above company, of which Gen. Shields is President.

—TONICA & PETERSBURG R. R.—Ground has been broken on the fourth division of this road.

—CEDAR VALLEY R. R.—The following are the county subscriptions already voted to this road:

Benton County.....	\$150,000
Chickasaw County.....	100,000
Mitchell “.....	200,000
Bremer “.....	100,000
Total.....	\$550,000

Floyd County is to vote in a few days on a proposition to subscribe \$150,000.

### The Industrial Development in its Relation to Railroad Traffic.

There is no circumstance connected with railroad progress more remarkable than the complete revolution which has taken place in the material and mode of traffic. When the railroad system was first commenced, it was taken for granted that *passengers* only would be carried. When, afterwards, it was evident that some freight would be carried, it was assumed that this would be very light, and very valuable articles, on which even a high toll would be a very slight tax on the value. When, however, the Massachusetts roads got into operation, it was seen that even this theory must be given up. They immediately did the carrying business of the factories; but that business is not, after all, in very heavy articles. It is chiefly in cotton and woolen goods, boots and shoes, small machinery, &c. But, a few years since the Reading Railroad went into operation, and it was at once demonstrated that a railroad could carry coal, *even with a canal alongside!* From that moment the vocation of canals was gone. But, it remained to show that such very bulky articles in relation to their value, as corn, hay, wheat, cattle, &c., could be carried profitably on railroads. This has been done by the Western Railroad and the great Central Lines. From henceforward a new career opens to the railroads. It is everywhere announced by the managers that *their freight business is the largest and best!* Even alongside of the great Erie Canal, of New York, the Central and Erie Railroads are doing an immense freight business; and the tolls of the Erie Canal are so reduced in the aggregate as to prove beyond a doubt that a very large part of its freight business, or of that which *would* have come to it, has passed from it to the roads. How far this process may go on we know not; but, one thing is certain, that all articles in relation to which *time* is of any importance, will be transferred from the canal to the railroad—and it is only very few and bulky things to which time is not of the greatest importance. The sum received for *freight* alone on the New York Central in the last fiscal year exceeded *four millions* of dollars—a sum greater than that received from passengers! And yet this road is almost on the bank of the Erie Canal. We have, then, before us *two distinct facts*, as the result of railroad experience.

*First*—Railroads can carry the very heaviest freight readily and profitably.

*Secondly*—The freight business already exceeds that of passengers, and is rapidly increasing.

Now, from this state of fact one conclusion is obvious: that the future of railroads *must depend upon the industrial development of the country*. It is true that this depends in a good degree on population; but there is another element to be taken into view. This is that

when a certain amount of *fixed capital* is put in farms, tools, factories, machinery, &c., that the *products* of this capital increase at a much *faster rate than that of population*. The reason of this is also quite obvious, in the fact that *production* does not depend altogether on *labor*, but also on the capital and machinery employed *with* labor. Hence, when the latter has once been employed to a sufficient extent, the addition of laborers will increase the products in a larger proportion. We have a signal example of this in the rapid increase of *production* in the State of Massachusetts. Certain staple branches of manufactures being introduced, they have increased since 1845 in a much more rapid proportion than that of population. Take the following examples. The values are those of the products:

	1845.	1855.	Increase, per cent.
Cotton Goods.....	\$12,193,000	\$26,160,000	120
Woolen Goods....	8,877,000	12,131,000	50
Leather, &c.....	3,836,000	12,205,000	260
Boots and Shoes....	14,799,000	37,529,000	160
Iron Manufactures.	6,900,000	17,600,000	130
Total.....	\$46,505,000	\$105,625,000	135

In this time the population of Massachusetts had increased about 30 per cent.; but the above articles of manufacture had increased 135 per cent! That is, the ratio of increase was four-fold that of the population!

We see, in this simple example, what it is that is so rapidly increasing the towns and the railroad freights of this country. It is the vast increase of the industrial arts.

A similar example may be found in the increase of products in the West. The following is the increase in the production of Indian Corn:

	1840, bush.	1850, bush.
Ohio.....	33,663,000	59,078,000
Indiana.....	23,155,000	62,964,000
Illinois.....	22,639,000	67,647,000
Kentucky.....	39,847,000	58,672,000
Tennessee.....	44,986,000	52,278,000
Total.....	169,290,000	280,639,000

This is an increase of about 70 per cent.; while the population of these States has increased rather less than 50 per cent. So the manufactures of Cincinnati have increased at a much more rapid rate than that of the city population.

The *tendency* of these facts is unquestionably to make the future of railroads better than the past; for the greatest part of their business is in *freights*, and the very rapid increase of manufactures, and of surplus produce, will increase freight, also, to a point far beyond anything heretofore known. The business of railroads generally is now much beyond the early *estimates*; and the great reason they have not paid better dividends is the unexpected *excess of cost*. This, however, has now nearly reached its maximum, and we may expect the roads will hereafter pay much better.



### The Great Opening of the Ohio & Mississippi Railroad.

The Great Opening is now over; and, as the particulars are all before the public, we shall give merely a notice of the principal epochs in that event.

The guests of the newly connected railroad lines, extending from the Atlantic coast to the Mississippi river, *via* Marietta and Cincinnati, took their departure from the Camden station buildings of the B. & O. R. R. on Monday morning last, at 6 A. M., and arrived at Marietta at 12 M. the following day. At Marietta, salutes were fired, and Mr. GETZ, Vice President of the road introduced the Hon. S. P. CHASE, Governor of Ohio; Hon. LEWIS CASS, Secretary of U. S.; and Count SARTIGES, French Minister. Gov. CHASE then addressed the venerable Secretary of State and the guests in an able and interesting speech. This was replied to by General CASS.

At 2.30 P. M. the train passed on to Athens and Chillicothe. At Chillicothe the guests remained all night, and were treated with all that hospitality which so strongly marks that hospitable town.

At 12 M. next day, the immense trains, carrying thousands of persons, arrived at Cincinnati, where they were escorted to the various hotels, private houses, &c., at which they were severally entertained. The streets were so crowded as utterly to preclude the possibility of a procession. The main display was made by the Fire Department, who certainly acquitted themselves to the greatest advantage. Speeches were made by Gov. CHASE, Secretary CASS, Gov. WILLARD, &c.

An account of the Excursion to St. Louis will be found in the following editorial letter from one of the corps, who accompanied the excursionists:

St. Louis, June 4, 1857.

Every one who has witnessed the festivities of the past week must concede that the celebration of the opening of the North Western Virginia, the Marietta and Cincinnati, and the Ohio and Mississippi Railroads, has been the great American Railroad celebration. Whether considered in respect to the extent of the lines opened, or their importance as through routes to accommodate the business and social travel and traffic of our whole country, or the extent and magnificence of the preparations, or the number, character and respectability of the invited guests, it must still be conceded that this celebration has been the great event in the history of railroads in our pre-eminently railroad country. As the carrying out and perfecting, by the hand of man, of the grand system of intercommunication inaugurated by nature in the location of the great central valley of our country occupied by the Ohio River—as the artificial realization of nature's grand original conception of a national East and West thoroughfare from the Mississippi to the Atlantic, this chain of roads, to say the least, must be

viewed with no uncommon interest. The simultaneous opening of 650 miles of new railroad in any, even the richest country on the globe, would be a great event, and it is only in our country that such an event has happened. But it is more than this; it is the completion of the grand chain of 1500 miles of iron road from Portland to St. Louis, incomplete without the links now finished, and that must sooner or later be extended in the same general direction, till it reaches the yet distant shores of the Pacific—this characteristic gives to this celebration a national importance that cannot be possessed by any other. Tickets of invitation to this great jubilee have been extended to over 2500 guests, comprising the wealthiest, most energetic and intelligent in our land. These guests have been invited to travel on *forty* railroads besides the one issuing the invitation, and witness the improvements and developments along 88,961 miles of travel, all of which have been constructed within twenty years, and many within five. We may well say, therefore that this has been the great American Railroad celebration, and will long be remembered as the most interesting re-union that our country ever witnessed.

We started with the crowd of visitors that had gathered from every direction into Cincinnati, on Thursday morning in the early train. The festivities of the previous day, and the fact that most of the visitors had been previously wearied with a three days journeying and rejoicing, prepared them the better to relish a quiet day's ride through a storm. It was already raining quite fast when we started, and although the fields and hills lost some of the brightness and brilliancy that a sun-light day would have given them, the deep, grateful intensity of green that the moisture imparted, compensated in great measure, and gave a hue of fertility to the scenery on the route that we do not always see in sunny days.

We shall not attempt to describe the physical features of the route, the hills and plateaus of Ohio and Indiana or the prairies of Illinois. They were all beautiful, fertile and luxuriant and give high promise of that abundant agricultural surplus that must give business and employment to a railroad passing through them. In our opinion the Ohio and Mississippi Railroad will not lack for business, through or local. The appearance of our train was hailed everywhere with delight, betokened in the waving of flags, the firing of cannon, and the gathering of the people. At about twenty miles from Cincinnati a cold collation was served around while the train was in motion, to which the early start of the passengers enabled them to do ample justice. At Fort Ritner luncheon was ready prepared, and the train made a stop while the passengers partook. At Vincennes the guests were invited to an ample repast where the best native wines relished the substantial viands provided for the occasion. Speeches were made by the Mayor of Vincennes, Judge Ellis and others. Their assurances of welcome and allusions to the early history of the road, called forth loud applause. Dinner

over, the train pursued its way and arrived on the banks of the Mississippi about midnight. The guests were welcomed in a short and appropriate speech by the Mayor of St. Louis, which was happily responded to by Mayor Pilcher of Louisville and were invited on board four large steamboats, to a well provided supper, and lodged as guests of the road. In the morning after breakfast we steamed a few miles above and below the city, and had a fine view of St. Louis. The city extends in a direct line seven and a quarter miles along the river, and at its ample levee lay over two hundred steamboats of every size and capacity. By the last census nearly a year ago, it contained 135,000 people, and with its floating population of from 10,000 to 30,000 may be rated at an average of at least 150,000. The business streets are too narrow and badly paved for a commercial mart. The last can be readily corrected, the first not so easily. The location is one which must command a large trade; midway on the Mississippi at the point which is the natural terminus of trade for the Missouri valley and the states that are springing up in its broad extent, its business is but just beginning. It must extend with the increasing population above it, and with the facilities that it stretches out to attract the trade and business of that population, to itself. Railroads extending up into every portion of this valley are the great want of St. Louis and must be built to preserve even the measure of trade it now has. It is idle to talk of increasing commerce without increasing facilities to bring it here. These must be given and given at once, or the present vigorous growth of St. Louis may be stunted for want of nourishment.

We were received at the levee at about 10 o'clock with the booming of cannon, and escorted into a procession of carriages and omnibuses, which took up its line of march to the Fair Grounds. Here are fifty acres of land, purchased by the State of Missouri some years ago at a cost of \$1,000 per acre, and presented to the Missouri Agricultural Society for a Fair Ground. The improvements cost the society some \$30,000 including fences, buildings, and a spacious Amphitheatre, built in a circle with twelve rows of seats and a spacious gallery for promenading, surmounting the whole; a tower and fountains are in the centre of the arena within the Amphitheatre. The seats are capable of accommodating 10,000 people and the gallery will stand twice as many more.

The streets along the line of march were densely crowded. The bright sky above and the immense mass of living life below rendered it a bright and happy scene. At least 70,000 people, citizens and strangers must have witnessed the procession in St. Louis. Arrived at the Fair Grounds the guests marched in procession around the enclosure and were finally seated in the spacious Amphitheatre. The military and fire companies and societies paraded around the arena in a magnificent display. A German society sang a song of welcome and the guests were welcomed in an appropriate and masterly speech by the Hon.



Edward Bates. His allusions to the distinguished character of the guests were peculiarly happy and his spirited descriptions of the mighty rivers centering at St. Louis, with their resources for trade and commerce would have been highly interesting, could they have been generally heard. The speech of welcome which occupied over an hour in its delivery being over, the guests partook of a sumptuous repast at which plates were set for 3000 persons. The regular toasts were drunk as follows: The President of the United States—responded to by Mr. Green. The Governor of Maryland—responded to by Hon. Mr. Travers; of Virginia by Hon. Mr. Thompson; of Pennsylvania by Mr. McComb; of Ohio, responded to on invitation by Prof. O. M. Mitchell; the Governor of Indiana, responded to by Judge Ellis. The Governor of Illinois by Ex-Governor Reynolds. The Army and Navy, by Maj. Crossman. The Mayor of Louisville by Mayor Pilcher; of Cincinnati, by Mr. Flagg; of Vincennes by Mr. Dick, and of Baltimore by Mr. Hawk. The next toast was the Ohio and Mississippi Railroad Company, responded to by Lewis B. Parsons, Esq., the Financial Commissioner of the company, in the following remarks for the report of which, being unable to hear, we are indebted to the Reporter of the Missouri Republic.

MR. MAYOR AND GENTLEMEN: I deeply regret that the unexpected absence of our Vice President, S. L. M. Barlow, Esq., from whom I hoped you would have had an eloquent response to this sentiment, devolves upon me the responsibility of replying to your call. Of the magnitude and importance of our enterprise—of the difficulties and embarrassments attendant upon the history and early progress of the work you have already heard from the eloquent lips of your distinguished guests, Prof. Mitchell and others. Of the later history, though myself connected with it, it may not be improper for me to speak, that the just credit may be given to whom it properly belongs, and I am sure that you as citizens of St. Louis will be glad to know that when two years since the progress of the work was arrested, having embarrassed and prostrated two of your distinguished fellow citizens, who had periled their all to insure its success, and after many efforts had been made and many unsuccessful plans proposed to push forward the enterprise, one of your fellow citizens again put his hand to the work, and after much difficulty succeeded in inducing his personal friends, the present managers, Messrs. Aspinwall, Alsop, Chauncy, Comstock, Leavitt, Hoady, Barlow, Gould, Hall, Lord and other to undertake to finish the road by the first of November next.

These gentlemen, as I am well assured, took hold through the solicitation of Mr. Bacon, and prompted by their desire to aid his house quite as much as from the expectation of a profitable speculation.

Thus while great credit is due as you have heard, to other cities and individuals, I am sure that the completion of this great trunk road to-day, instead of years to come, is justly and fairly to be attributed to HENRY D. BACON, Esq.

Gentlemen, after years of labor and sacrifices this great arterial line of road is completed and we are met from all parts of our common country to exchange kindly greetings and mutual congratulations on the West bank of the Father of Waters. You have come in a multitude to this geographical centre of our country.

You have passed by thousands over our work. You have seen our prairies in the full bloom of spring. You have seen our towns and witnessed the changes of a few years—have participated in the festivities of the occasion, and experienced something of the hospitalities and Union loving feeling of our two great central cities of the Mississippi basin, and I am sure when you shall have returned to the quiet of your own distant homes, you will feel that however separated we may be by distance and sectional lines, we are still of one origin—one family—and bound together, not alone by a unity of interest and iron bands, but by the stronger and the silken chords of friendship and kindness. Then, myself and associates feel that whatever have been our labor, our cares and anxieties, in carrying out this excursion trip, our efforts have met with the most ample reward.

The Baltimore and Ohio Railroad was next toasted. The Press, responded to by Hon. Erasmus Brooks of New York. Our Federal Union by Mr. Darby.

Thus ended the festivities of this great celebration, the final exercises of which were witnessed on the Fair Ground, by at least 10,000

people. In point of comfort, good feeling and magnificence, we have never seen it equalled, as we are quite sure that the cities interested in the event they have commemorated have never seen its equal in importance to them.—The arrangements of the Ohio and Mississippi R. R. Co. for the safety and comfort of its guests were perfect. Flag men were stationed at intervals of a mile apart, and where curves and deep cuts or embankments occurred, at shorter intervals. Locomotive engines ready fired up were waiting at intervals on the road, so that in case of accident to one, another would be procured at very short notice. All opposing trains were withdrawn and the excursionists had the freedom of the road with every precaution taken for their safety that prudence could dictate or experience suggest.

The past has been a great day for St. Louis, Cincinnati and the broad valley of the Ohio. May it be the harbinger of that greater celebration that shall mark the completion of the great AMERICAN RAILROAD destined to bind the Atlantic with the Pacific, on our own territory and under the genial protection of our own institutions and laws.

JUNE 8TH, 1857.

Owing to a misapprehension of the day of the principal celebration, hundreds of excursionists did not reach St. Louis on Friday morning, to join the celebration. Friday trains came densely loaded with excursionists, and it was resolved to hold a meeting on Saturday evening at the Varieties Theater. At 8 o'clock the Theater was densely crowded with the visitors and citizens. Mayor Wimer, of St. Louis, was called to preside. Henry D. Bacon, Esq., of St. Louis, and Prof. O. M. Mitchell, of Cincinnati, were chosen Vice Presidents. Charles D. Drake, Esq., was selected to make the opening speech. Mr. Drake welcomed, in the name of St. Louis, the invited guests. In referring to the great central valley of our country, he said:

"Coming, as you do, the invited guests of the road, I say you are well repaid for coming; for you begin in this good hour, when you look first upon the turbid waters of the Mississippi, you begin to see the world for the first time. I humbly trust that you will not, any of you, consider that I would disparage the homes of your choice; but, while I love the whole country of which we are the children, 'I love not Caesar less, but Rome more; and here is the Rome of the United States, in this great central valley of the Mississippi.

If you noticed, as you came along, the boundless prairies over which you were whirled with the power of steam, what conceptions gave they not to the mind of him who has never before seen them? How the thought enlarges and expands, and how we feel when we look upon that territory of prairie, and remember that when it comes to be peopled as Europe is peopled now, what nation more glorious will stand under the rays of the glittering sun? The mind of man can form no conception of what this country and people are to be when that is done. We welcome you, then, to a region of which we have no occasion to be proud, save as we have hitherto, it, as we found it from the hand of nature; but for which we have every reason to be thankful to the great giver that has thus made a valley here, in the midst of this continent, the like of which the world looks not upon, from East to West, from North to South."

Col. Black, of Pittsburgh, followed, and, in a happy speech, alluded to the proximity of the sources of the Susquehanna and the Ohio, and those of the Columbia and Missouri, and to the finger marks of nature in her rivers, inviting the hand of man to plant railroads. Col. Black was followed by Prof. Mitchell, of Cincinnati; Mr. James Brooks, of New York; Hon. Mr. Harris, of Baltimore; Hon. Mr. Phelps, of Massa-

chusetts; Judge Ellis, of Vincennes; Mr. Corry, of Ohio; Hon. Mr. Loomis, of Pennsylvania; and Mr. W. Pinckney White, of Maryland.

The evening exercises were characterized with an enthusiastic feeling, and the guests parted well pleased. On Saturday evening also a meeting of the guests of the road was held at Library Hall, and the following gentlemen called to preside:

H. N. GALLAGHER, Esq., Charleston, Va., Chairman.

Hon. ERASMUS BROOKS, N. Y.  
" P. T. THOMAS, Md.  
" FAYETTE M'MULLEN, Md.  
" J. M. HARRIS, Md.  
" EDWARD SHRIVER, Md.  
" JNO. L. HOUSE, D. C.  
" CHAS. A. PHELPS, Mass.  
" Ex-Gov. H. DUTTON, Con.

Vice Presidents.

J. R. THOMPSON, Esq., Va.  
EDWARD FULTON, Esq., Md.  
WM. PARKER, Esq., Mass. Secretaries.

The committee on resolutions consisting of the following gentlemen: W. B. Shaw, of D.C.; W. H. Travers of Md.; J. W. Simonton of N.Y.; Paul Cooke, Esq., of Va.; Hon. Chas. A. Phelps of Mass., reported the following resolutions:

*Resolved*, That the completion of the several lines of railway from Baltimore and St. Louis, over which we have passed with such speed, safety and comfort, constitutes a result of truly national importance, forming as they do, a short and direct route between the Atlantic Sea and the commercial centres of the Ohio and Mississippi Valleys—Cincinnati and St. Louis.

*Resolved*, That the good practical management, the stupendous engineering triumphs, and the sublime natural scenery which characterize the Baltimore and Ohio Road, render it one of the most attractive and valuable of all our internal improvements.

*Resolved*, That the Marietta, Cincinnati and the Ohio and Mississippi roads, which continue this great avenue to the central west, are destined to become a grand trunk line, extending not only from the Atlantic to the "Father of Waters" but even to the shores of the Pacific Sea.

*Resolved*, That the generous hospitality of the Baltimore and Ohio, Marietta and Cincinnati, and Ohio and Mississippi road, and also of the citizens of Chillicothe, Cincinnati and Vincennes, commands and receives our warmest acknowledgments.

*Resolved*, That the boundless liberality shown in our overwhelming reception and kind treatment by the people of St. Louis mark them as a community of rare generosity which will be ever held in our most grateful remembrance.

The following was also unanimously passed:

*Resolved*, That our thanks are due and hereby tendered to those Railway Companies who have in their generosity tendered to us a free passage over their roads on our way to and from St. Louis.

The tickets for the excursion are good to the 16th, and it is probable that the trains will continue up to that time to bring crowds of distinguished visitors who preferred to avoid the grand rush on the celebration day. W.

#### BREVITIES.

—NEW ALBANY AND SANDUSKY CITY RAILROAD.—The work on this road has been indefinitely suspended. The New Albany Tribune in noticing this, says:

That this road will be completed by the Messrs Howards, at least to the junction of the Ohio and Mississippi road, we have very little doubt. Indeed they have too large an interest in the road to permit it to go down, if it can possibly be avoided.

—PENSACOLA RAILROAD.—The work on this enterprise, and the laying of the iron, says the Alabama Journal, published at Montgomery, progresses with briskness. A splendid heavy locomotive, named the "Peachy Gilmer," after a well known esteemed citizen of this county, and a large stock-



holder, arrived a few days since for the road. It as an elegant as well as powerful machine, and with all the latest improvements. Such is its weight that it required several days to place it at its destination from one depot to the other. It was hauled on a car constructor for the purpose.

—ALABAMA AND FLORIDA RAILROAD.—This road is entitled to 355,000 acres of land, under the laws of Congress, devoting lands to Florida for Railroad purposes.

—GRAND RAPIDS & INDIANA RAILROAD.—The Company which is to extend the line of this road to Mackinaw was organized at Grand Rapids on May 22d. The length of the line is to be 215 miles.

—GALVESTON, HUSTON AND HENDERSON RAILROAD.—The first twenty-four miles of this road are completed and in running order.

—WASHINGTON & MARYLAND LINE RAILROAD.—The stockholders of the Washington and Maryland Line Railroad met at Lancaster, Pa., on Tuesday last, for a permanent organization. Robt. Black, Esq., was elected President, and a full board of directors chosen. The charter of this company confers the right to construct a railroad from Columbia, along the east side of the Susquehanna, to the Maryland line, (probably at Port Deposit,) where a connection with a branch now constructing from Perryville by the Baltimore Railroad Company is contemplated.

—HOOSAC TUNNEL.—The Governor of Massachusetts has vetoed the bill for the relief of the company building the tunnel.

—SPRINGFIELD, KEOKUK & WARSAW RAILROAD.—A regular meeting of the corporators of the "Springfield, Keokuk & Warsaw Railroad" was held at the Mayor's office, in the City of Beardstown, on Wednesday, April 15th, 1857, pursuant to a thirty days notice, as provided by the charter of said Railroad.

The meeting resolved forthwith to proceed to the necessary steps for the building of the road.

—PEORIA & HANNIBAL R. R.—The line of this road has been located to Lewistown, under the direction of W. G. Wheaton, Esq., Chief Engineer.

—MAYSVILLE & LEXINGTON R. R.—We learn from the Maysville *Eagle* that the present owners of this road have made the following proposition to certain citizens of Maysville who are anxious that it should be completed: "They propose that they and the new company that may be formed shall select competent persons to value the iron, cross-ties, tools, and other movable property that is not now a fixture to the road; and at the valuation that said persons may fix on said articles, they will convey the same, together with the unfinished part of the road between

this and Paris, and all their rights, privileges and franchises, to the new company that will undertake its completion. It is estimated that the iron and other movable property on the road, including the iron laid down near this place, is worth about \$15,000, and that that sum, therefore, will be all the new company will have to pay for the road and everything pertaining to it in the condition it is now in between place Maysville and Paris.

The liberality of this offer will be apparent when it is understood that the amount of grading alone that has been done has cost fourteen hundred thousand dollars. The estimated amount necessary to complete the work is about seven hundred thousand dollars.

—LICKING RIVER.—Some efforts are being made to revive the enterprise of improving this stream, for the benefit of the towns of Covington and Newport, Ky. The meeting was addressed by Gen. Mosely and Mr. R. Richardson—both gentlemen making very interesting speeches, full of statistical information and common sense. We trust that these efforts will be unabated until the completion of the work.

—THE CHARLESTON JUBILEE.—The largest and most imposing procession seen in Charleston since the Calhoun funeral procession, took place on Thursday of last week. The *Courier* occupies five columns with a report of the procession, speeches and dinner.

The procession, consisting of the various military and fire companies, the city authorities and delegates, formed on Citadel Square, and moved down Meeting, Broad and East Bay to the Battery, where a platform had been erected for the speakers. Here was performed the ceremony of mingling the waters of the Mississippi with the Atlantic, by the Memphis firemen and the Phoenix Fire Company of Charleston. The scene was a grand one—the Battery and every available point for a long distance being crowded with thousands of interested spectators, and, as the water from the Father of Rivers fell into the Atlantic, a shout went up from every one of the assembled multitude. At the conclusion of this ceremony, Mayor Miles introduced Hon. A. H. Douglass, Mayor of Memphis, who made a very happy, feeling and instructive address. He was followed by Gen. Wm. T. Haskell, Hon. Jere. Clemens and Hon. A. H. Chapell. After the speaking, the party sat down to a sumptuous repast, served at the expense of the city of Charleston, where a large number of patriotic toasts were drank and speeches made by some of the most prominent men in the South.

The members of the press had a dinner at Mount Pleasant on Friday, at which every one enjoyed the most perfect freedom. The ball on Friday night was attended by the beauty and fashion of the city, and the spirit was kept up until a late hour, and was enli-

vened by several of the belles of Memphis and Huntsville.

On Saturday there was an excursion down the harbor on the *Isabel*, the *Gordon* and the *Nina*, in order to give the Western visitors a sight of the broad Atlantic.

—MILWAUKEE.—The outstanding debt of Milwaukee, as given by Mayor Cross, is \$1,802,050. The following amounts have been loaned to the various railroads centering at this point:

Lake Shore Railroad.....	\$200,000
Beloit & Milwaukee.....	100,000
Milwaukee & Mississippi.....	200,000
Milwaukee & Watertown.....	200,000
Milwaukee & Horicon.....	166,000
La Crosse & Milwaukee.....	260,000
Milwaukee & Fond du Lac, transferred to the La Crosse & Milwaukee.....	114,000
Milwaukee & Superior.....	100,000

Aggregate.....\$1,350,000

For so small a town, Milwaukee has been one of the most liberal in her railroad grants, and will no doubt, as she so richly deserves, reap a rich reward for her munificence.

## Railroads.

### NEW ALBANY & SANDUSKY CITY JUNCTION R. R.

Report of the President and Directors of the New Albany & Sandusky City Junction Railroad Company to the stockholders:

"Circumstances beyond the control of the President and Directors of the N. A. & S. C. J. R. R. Co. having forced upon them the necessity of suspending further operations upon the work under their charge, and offers of compromise having been made by Messrs. S. & C. Howard, contractors for the entire road, by which they propose to cancel and surrender their contract on favorable terms, it is due to the stockholders that a fair and full exhibit of the present financial condition of the company be made.

The following statement exhibits briefly the entire assets that have come into the hands of the company, as being applicable to the construction of the road:

ASSETS.	
Amount received on cash subscription.....	\$ 54,000 00
Real estate bonds issued on \$154,000 of appraisement.....	110,000 00
Balance real estate covered by mortgage to Ohio Insurance Co., worth say.....	10,000 00
Amount second mortgage bonds on road bed.....	57,000 00
Proceeds of seven city bonds sold.....	4,500 00
City coupons.....	18,214 00
Rents on real estate.....	562 00
Premium on exchange.....	20 24
Amount of interest to be paid by city July 1,.....	6,000 00
	\$260,006 24
EXPENDITURES.	
Paid on account of construction.....	\$171,838 37
Engineering.....	16,019 89
Right of way.....	16,370 88
Office salaries.....	11,677 77
Interest and exchange.....	11,959 24
Incidental expenses.....	10,996 00
Discount on 67 real estate bonds.....	6,150 00
Taxes and street improvements.....	2,518 75
Repairs on buildings.....	700 00
Interest paid on real estate bonds.....	4,266 67
do due July 1, 1857.....	3,850 00
do on second mortgage bonds.....	4,724 12
Commissions in New York to Trustees and others.....	6,423 10
Paid for depot grounds.....	1,800 00
	\$368,115 86
Assets brought down.....	\$260,006 24
Showing amount of expenditures over assets.....	\$ 108,109 62



"It will thus be seen that all the assets that came into the hands of the company exclusive of city bonds and \$53,000 of real estate) have been expended, leaving a deficit unprovided for of \$8,109.

"It may be proper to add that \$43,000 of the real estate bonds and \$10,000 of real estate mortgaged as aforesaid are not absolutely sold, but only hypothecated for certain monies the company was compelled to raise. Of the amount of city bonds that have been issued, \$60,000 are held by the Ohio Insurance company as collateral security for monies advanced by them; \$40,000 are held by the same office in trust for private individuals, who gave their notes for bonds returned. Amount sold \$7,000. The balance, \$93,000, are in the hands of the company. The amount of the company's indebtedness, including interest, for which these bonds are pledged and held, is about \$55,000.

"Of the cash subscription originally made, amounting to some \$83,000, at least \$13,000 is wholly unavailable, some of the parties having subsequently failed, some subscribed in work which cannot be exacted if the road fails, and others again deny having ever authorized the subscription.

"Sixteen miles of the road bed are already graded and ready for the superstructure. Four miles in addition are partially graded—to complete which (it is estimated) would cost some \$12,000. This, added to the construction account above stated, would make the whole cost of grading the first twenty miles of the road, \$183,858; or an average of \$9,192 per mile. To furnish the cross-ties and lay the track would cost not exceeding \$1,000 per mile. This would bring the whole cost of the work some \$1,500 per mile below the original estimates. This fact is alluded to merely for the purpose of showing that the work has not cost as much as was originally contemplated, and that in the whole matter the Directors have been actuated solely by a strict regard to economy.

"From the exhibit thus made, it must be apparent to all that the company have no other resource left them but to suspend further operations on the road, and make the best arrangement they can with the contractors and other creditors, hoping to see the enterprise meet with more encouragement and better success in other hands.

All of which is respectfully submitted by the Board. JAMES MONTGOMERY,  
President.

NEW ALBANY, April 30, 1857.

MEMPHIS & LITTLE ROCK R. R.—We learn from the Memphis Appeal of May 30th, that the first rail in this road was laid on May 29th. It is expected that work will be vigorously prosecuted till the whole road is opened. This is an important road and we trust the expectations of its friends will be realized.

THE SABINE & GALVESTON BAY RAILROAD AND LUMBER Co.—Little has been hitherto said and next to nothing published with regard to this company or the enterprise in which they are engaged. It has been generally known that they had a work in view of vastly more importance and concern to this State than any before undertaken—one which when fairly announced would meet a popularity not before gained by any road proposed in Texas. The agents of the company have been quietly at work in their own way, and have now got their matters so arranged as to begin to show what they are doing. From a conversation with one of their leading members a day or two since, we gleaned some information as to their designs and prospects, which, as in duty bound, we proceed to lay before our readers.

It is proposed to construct a first class railway from some point on the Sabine river, at or near Madison, to the city of Houston. The object of constructing this road is primarily to open a channel of communication between the great pineries of the Sabine and the vast arable prairies of Western Texas; and to place all Eastern Texas in communication with the railroad center of the State. This last object is more completely accomplished by the Henderson & Mexican Gulf Railway, now being graded from the point of an intersection with this road at or near the town of Beaumont.

But, secondarily, and what in importance is destined to swallow up the other object almost entirely, the design is to supply a link in the chain of road between New Orleans and Houston—thus placing the metropolis of the South in direct railroad contact with the emporium of Texas, and placing our whole State in a position to choose from the markets of the world the place for selling produce and buying supplies. A bare glance at the position of things will, we feel assured, convince any person of the feasibility and importance of this enterprise.

The distance between New Orleans and Houston, by actual survey, is as follows:

	Miles.
New Orleans to Berwick's Bay, the present terminus of the railroad.....	80
Thence to New Iberia.....	44½
New Iberia to Madison, on the Sabine.....	113
Madison to Houston.....	96½
—Total distance.....	336

Eighty miles of this is already completed, leaving two hundred and fifty-six miles yet to be constructed; of which, in round numbers, one hundred is undertaken by this company. The capital necessary for this part of the work is mostly secured, and no doubt need be entertained but that it will be carried on to completion in a reasonably short space of time. This whole two hundred and fifty-six miles is on good solid ground, and passes through a country which will feed the road at every point.

The remaining one hundred and sixty miles will necessarily depend a good deal on the disposition manifested in New Orleans to place itself in immediate connection with Texas. It is believed when the facts of the case are fully set forth there can be no hesitation there. That this will be the best means of making such a connection will be apparent at a glance.

This road, when built, becomes the great trunk road for all the roads in this State.—Almost all of those now really progressing have a common center at Houston.

In the first place, we have the Houston & Texas Central Railway, leading from Houston

to the wheat region. Thirty-five miles of this are already completed, and the balance is being pushed forward with a spirit that admits of no delay. It will have reached the 32d parallel by the time either of the roads pointing to El Paso may be completed to the place of junction. By this connection the entire wheat region of Texas will be placed within two days of the Crescent City.—Branches of this road will point in such directions as to place the whole country in immediate contact with market.

Then we have the Harrisburg Road, pointing to Western Texas, which will reach Columbus, a distance of sixty miles, within a year from the present time, and which is connected with Houston by the branch. This road is destined to be the thoroughfare of nearly half the State; and, with the roads which are the subject of this article, will furnish transportation to hundreds of thousands of cattle which swarm the vast western prairies, every year, to the Mississippi river. This item of freight will eventually surpass the calculations of the most sanguine.

Again, we have the Houston & Galveston Road, to be completed in November, through which, and these now under consideration, that city will be placed several hours nearer New Orleans than it otherwise can be; and access will be had to its delightful beach, its pleasant streets, and its summer gaieties, without the risks and discomforts of a sea voyage.

Then there is the Hudson & Brazoria Road, which, if completed, will open the richest lands of the world to the advantages of another market.

The Galveston, Houston & Henderson Railway is also to be extended northeast from here, penetrating to the cotton region beyond the Trinity, and affording cheap transportation to hundreds of thousands of bales to be raised on as yet uncleared lands.

The Henderson & Mexican Gulf Road we have alluded to. This will act as a feeder to the Louisiana portion of the road, and will also give us still a large trade, of which nothing now is known here.

In a future article we propose to examine the prospective business of this road, and to show that no road in the United States was ever projected with an equal prospect with it. Its annual income in ten years from to-day will equal its prime cost.

It is difficult when all these things are considered—nay, impossible, to doubt the practicability and importance of these plans. The success of the scheme is and must be a certainty. We confidently expect, within the next five years, to go to New Orleans in twelve hours from this city, on a regular train carrying a thousand passengers. Let a note be made of this. The result is as certain if the road is built as that any effect can follow an adequate cause.—Houston Telegraph.

#### THE G. R. & I. R. R. CO.

We understand that the Directors of the above-mentioned company were in session at their office in this village on Friday and Saturday of last week, and that a large amount of business was transacted at this meeting. Articles of association for a new corporation from Grand Rapids to Traverse Bay was signed and five per centum in cash paid in, and the articles forwarded to Lansing, to be filed, as the law, in such cases, directs. This organization is made for the purpose of extending the line of the G. R. & I. R. R. to Mackinaw, which will be done by a consoli-



dation of this new company with the old one. The title of the corporation is, "The Grand Rapids & Mackinaw Railroad Company." The length of the line from Grand Rapids to Mackinaw is about 215 miles. The amount subscribed to the capital stock at the organization was \$216,000.

The names of the Directors selected for this new corporation are as follows:

1. Sarell Wood, Grand Rapids, Mich.
2. Edwin Mann, Otsego, "
3. Wilson C. Edsell, " "
4. Patrick Marantette, Notawa, "
5. William Henry, Sturgis, "
6. Philip H. Buck, " "
7. Jonathan G. Wait, " "
8. Richard Reed, " "
9. Benajah M. Adams, " "
10. James Z. Gower, " "
11. John B. Howe, Lima, Ind.
12. William S. Boyd, Lagrange, "
13. John L. Doty, " "

The next quarterly meeting of the Board will be held at the office of the company in this village on the 16th day of June, when this new corporation will elect its officers, and the Board then being (both of them) present, will enter into articles of consolidation, which will be perfected as soon as the forms prescribed by the statutes can be complied with.

The surveys north of Grand Rapids are going on rapidly. One party of engineers have reached Grand Traverse Bay ere this if they have had no bad luck. An agent of the company has been dispatched to the Land Office at Duncan to procure maps of the public lands, so far as they are within fifteen miles of the line of this road, and within the Duncan district. This is an expense the company did not expect to have to incur, as by an arrangement with a company formed at Grand Rapids last fall, the Grand Rapids & Indiana Railroad Company had contracted for the papers and fixtures of said company, among which was a map of the public lands of the Duncan district, and some other articles of value, which the persons holding them refused to surrender according to said arrangement.

The business preparatory to a vigorous prosecution of the work is progressing as rapidly as circumstances will permit. The length of line being 350 miles, requires a vast amount of labor. The engineering of a section thirty-five miles north of Grand Rapids, from the difficult and peculiar character of the face of the country, required near one hundred days in the preliminary and experimental surveys.

The company now have three parties of engineers in the field north of Grand Rapids. —*Sturgis Republican*, May 28.

**ROCK ISLAND BRIDGE—COMMERCE MOVING.**—Looking from our office window, on Thursday, we saw two large and heavily laden steamers pass up through the draw of the great bridge within five minutes of each other, and without a moment's detention. In two or three minutes more the draw had closed and an immense train of cars laden with freight passed over the bridge—the whole time of the passage of the boats and cars not occupying ten minutes. It was an imposing and useful spectacle, giving one an idea of the majesty of commerce—the great trade constantly passing over the two thoroughfares—the river and railroad—the free passage

afforded to boats by the bridge and the grand utility of the bridge itself.

The river is very high, and if there is ever a time when boats necessarily find any difficulty in passing the bridge, it is now. Yet boats are passing and repassing constantly, just as those two we observed on Thursday.—*Rock Island Advertiser*, 27th ult.

#### RAILROAD MEETING.

At a meeting of the citizens of Paducah at the Court House, on Thursday night the 28th of May, on motion W. F. Norton Esq., was called to the chair, and Col. Noble, was requested to act as Secretary.

After the President had explained the object of the meeting; Judge Campbell, offered for the consideration of the meeting, the following resolutions, which were unanimously adopted.

Whereas the recent purchase of iron to lay the entire track, of the Mobile and Ohio Railroad, renders the completion of the main stem of that Road, within the next year a matter of great certainty, and the advanced state of the New Orleans and Ohio Railroad; and their late purchase of iron; places the completion of that road within the next year as equally certain. Thus connecting by Railroad the City of Paducah, within two years, with the Cities of Mobile, New Orleans, Memphis and Charleston. And believing that the extension of the road from Paducah to Vincennes in the State of Indiana will greatly conduce to the benefit of the whole country, by affording the nearest and most direct route in the valley of the Mississippi connecting the North and the South, and developing the rich lands and mineral wealth of the State of Illinois. We would call the attention of an enlightened public to the necessity of the speedy construction of the Vincennes and Paducah Railroad, and in doing this we invite only an investigation into this proposed road, 124 miles in length; it connects with Vincennes 185 miles from Cincinnati; from which City radiate Railroads in every direction, East, West and North, a reference to the map of the United States, will exhibit the fact, that a direct line from Chicago to New Orleans passes through Vincennes and Paducah and an air line from Paducah to New York, runs South of Cincinnati about 110 miles, and an air line from Vincennes to New York passes through Cincinnati. Thus manifesting the fact, that the great travel in the West and South West, going North or South, will use the Paducah Railroad from its intersection with the Mobile Road, and the Paducah and Vincennes Road as the great route of travel.

Therefore, *Resolved*, That in view of the foregoing facts and of the commanding position of the City of Paducah as a great manufacturing and Commercial Emporium, and of the great mineral wealth of the country between Paducah and Vincennes, abounding in iron, lead and coal; and the great fertility of the soil. We declare our earnest wishes for the speedy construction of that important and necessary link in said road of travel between the North and South.

*Resolved*, That we commend the zeal and foresight of our friends in Southern Illinois, in making their laudable efforts for that Road, and express to them, our conviction, that the energy and sagacity and enterprise of commercial men will freely appreciate the vast value of such a Railroad between Paducah

and Vincennes over any other proposed, or possible connection North or South.

Dauid Watts Esq., then offered the following resolution which was likewise adopted by acclamation:

*Resolved*, That the Directors of the road be requested to call a meeting of the Board, to take steps towards the speedy prosecution of its construction.

*Resolved*, That the City, Vincennes and Shawneetown Papers publish these resolutions.—*Paducah Dollar Times*.

#### Railroads in the State of Maine in '56.

We give the following abstracts from the *Merchants' Magazine*, relative to railroads in the State of Maine:

	Length.	Cost.	Receiv. for passengers.	Receiv. for freight.	Other sources.	Total.
Atlantic & St. Lawrence.....	149	\$6,308,870	\$151,805	\$303,072	\$20,890	\$505,767
Androscoggin & Kennebec.....	53	2,278,415	107,063	19,206	0,047	212,696
Androscoggin.....	30	434,877	10,502	12,213	1,282	23,005
Bangor & Oldtown.....	13	178,523	18,100	17,429	103	35,608
Bethel branch.....	18	300,000	8,171	6,108	381	11,660
Calais & Hallowell.....	6	234,000	2,404	28,268	1,416	32,880
Kennebec & Portland.....	72	2,871,204	154,005	30,014	8,979	223,298
Mechanicville.....	7	100,000	15,000	6,000	0,000	21,000
Portland, Saco & Portsmouth.....	51	1,391,573	192,331	61,284	11,416	264,774
Portland & Kennebec.....	35	1,500,834	100,000	30,000	0,350	112,701

From the Somerset & Kennebec Railroad, which is 39 miles long, and from the York & Cumberland, 18 miles long, there are no returns. There is also a short section of the Boston & Maine Railroad, and one of the Great Falls Branch, in Maine, not included in the above table, making the length of lines in operation in Maine about 508 miles—costing about \$17,500,000, or \$34,000 per mile. The law of Maine does not require any returns of the working expenses of railways, so that all the information given thereby is of very little practical value. The gross earnings in 1856, amounting to about \$1,500,000, were equal to about nine per cent. on the cost of the lines. Allowing five per cent. for working, and they would yield about four per cent. on the cost.

One striking fact is noticed from a comparison with previous years—viz., the constant increase of freight over that of passenger traffic. The aggregate receipts for freight exceeded those for passengers in 1856. There was a handsome increase in the business of the Androscoggin & Kennebec Railroad, and a small one on the Atlantic & St. Lawrence Railroad. The cost of building these lines has exceeded, by one-third, the estimate on which they were undertaken.



## VENTILATION OF MINES.

In a lecture recently read before the government school of mines, England, on this subject, we find the following account of the systems of ventilation now practised in that country. In some places it is affected by a triangle being placed over the mouth of the shaft, from which the fire is suspended in a vessel by chains; it was not advisable to place it at the bottom, but at a some slight distance from it. Different sorts of furnaces were at times used, the air passing through the furnace-bars; sometimes the furnace-drift is obliged to be of some length—from eight to ten or twenty yards: the furnaces were of various constructions, and a representation of a double furnace was described. This furnace generally had an arch of brick, and it was so placed as to avoid setting fire to the bed of coal in its vicinity. Sometimes an arch was built at the side, in order that a current of air might be allowed to pass through it, as well as to isolate the furnace; at other times an opening was left, and this was filled with stoppings, or some other non-combustible material, the width of the furnace was in general from 5 ft. to 11 ft., but there was a great difference among colliery viewers, as to the height of the furnace-bars. It required that when the furnace was fed the coals should be thrown dexterously in, so that they might be uniformly cast over the whole surface. It was necessary that there should be kept up a constant current of air with very little smoke. Sometimes the draught was augmented by putting up what was called a "blower."

In some parts of Belgium the Government will not allow the collieries to be ventilated with furnaces, in order to prevent accidents from the return air. The furnace is especially difficult and dangerous to deal with when an accident has recently taken place; and it is a most critical task to light a fire after an explosion has occurred. When it is not thought compatible with the safety of the men to send them down, the furnace is lighted by means of an iron wire suspended by a ring. At times it has been found, under efficient arrangement, to be very efficacious; but it should be properly looked after, and much must depend upon the temperature of the air. In the up-cast the temperature varies from 160 deg. to 120 deg.,—the average might be computed at 140 deg. The downcast shaft could be reckoned at 60 deg. Here there was a difference of 80 deg. The furnace at the Hetton Colliery passes 200,000 cubic feet of air per minute. The idea which was entertained by some persons, of introducing air-pipes into the air-ways was perfectly futile; the plan had been tried on many occasions and found insufficient. The lecturer next alluded to Mr. Goldsworthy Gurney's plan of introducing a jet of steam at a high pressure. This gentleman thought that if, instead of a furnace, he put down a pipe, that a jet of steam would produce a sufficient current of air. This plan excited a great deal of notice at the time; a committee of the House of Commons was appointed to consider its merits, and several experiments were carried out at the Polytechnic Institution on a small scale.

A number of practical experiments were made; the steam pipe was taken to the bottom of the pit. This was found, in a comparatively short period, to exhaust the steam of several boilers, and but very little ventilation arose from it. A dozen to thirty-six steam jets were tried—some of them from one-eighth to one-sixteenth of an inch in diameter; the quantity of air was gauged: all these methods

were attempted; the steam was let off, the fire lighted, and it was found that the effect given by the furnace was much greater. A great many experiments had been tried in several parts of England, where the steam jet had been found extremely useful as an adjunct. The point, however, to be considered in the working of coal mines was the laying out of the collieries in the first instance, so that the air could be distributed over those parts where the men were engaged.

The fuel used in the furnace was generally small coal. The general consumption of an ordinary furnace was about two tons in 24 hours. In order to make the furnace more secure from return or vitiated air, you may keep it without. This may be effected by bringing from some other part of the workings a stream of air, commonly called a 'scale,' solely to feed the furnace. There was sometimes a great difficulty in carrying this; and when he had occasion to examine the Risca pit, the cross-headings were not free from gas. Splitting the air was a great improvement; this, as well as working in compartments, has been a great benefit to the miner; in some collieries the air was split into as many as 8, 10, and even 16 parts. The mode of ventilating the goaf is always a source of great danger. A strict discipline, however, should be observed. In some places none but safety lamps were allowed to be used, and this regulation should be rigidly enforced, as many accidents might be prevented.

The temperature of the atmospheric air, as he had previously observed, had a considerable effect on the ventilation of a colliery. In many cases a barometer was kept at the surface, and it was always advisable to have one underground, as by it they were enabled to see the quantity of air that was required, and where it was deficient. When a large escape of gas takes place from the goaf it is always desirable that they should put more air to it, in order that it should be diluted. The distribution of air was a most important subject, and attracted the attention of colliery viewers for a considerable period. The lecturer then alluded to the laws on the subject laid down by Mariotte and Gay-Lussac; a comparison was then drawn between the resistance of air in levels of one mile and nine miles in length, together with the power to overcome it; if in the one case the velocity of the air was 3 feet in a second, and in the other 6 feet, the resistance will vary as the square of the velocity; in the one instance it will be 9, in the other 64. It is always important to reduce the velocity of the air; at the same time it should be of such force as to provide a good current. This was one of the reasons why there had been such an objection against large fans being employed—it was always more preferable that the air should be regulated at a lower velocity than that it should be allowed to course with too great speed. The air-ways ought always to be made of sufficient size. Some colliery viewers were of opinion that they should be of small dimensions. If constructed large, so as to afford a free passage for air, much of the expense of machinery would be avoided. When the air went through a goaf it generally met a greater resistance at the rough sides. The air-way should be as smooth as possible; where this was left with rough shale it became very prejudicial to the passage of air.

It was an acknowledged fact that two-thirds of the men whose lives were sacrificed were killed by the choke damp after the explosion had taken place. The laying out of the works

in the first instance should be studied. If the upcast was placed at a distance from the downcast there would always be a current through. Special danger arose from blowers. These are occasionally near faults. Blowers occur in the line where dislocations had taken place. In some cases the only way they had was to knock a blower out with gunpowder; this, however, was dangerous under ground. As to the danger likely to arise from the burning of the coals, and the various modes which were tried to extinguish this: In some cases it was taken out with shovels; in others they were obliged to cover the shafts, and several instances had happened where the fire had lasted for weeks; the wetting of the coal and pyrites in cases often caused the very accidents that it was desirous to avoid. Mr. Goldsworthy Gurney was of opinion that, where conflagration with small coal occurred, it could be extinguished by driving down carbonic acid, by means of a steam pipe. This was found efficacious in one instance, but in others had not been so successful; like Mr. Phillips' Fire Annihilator, it sometimes had the power of producing that destructive element—an admixture of carbonic acid with atmospheric air being very likely to have that effect. Sometimes, when a fire could not be put out by ordinary means, a drift was cut around it to isolate it from the other workings; at other times water was let in, either by leaving off pumping or turning in the course of a small stream, as had occurred in the case of the late fatal accident. Testing the ventilation of mines was very simple if the level was of a regular size—say, 6 feet by 5 feet, you have an area of 30 square yards. By firing a pistol and following the smoke with a watch with seconds-hand, the volume of air could be ascertained; others did it with a candle, walking steadily, looking at the flame, and judging from that whether the air was going backwards or forwards.

**BUSINESS OF THE SAULT STE. MARIE CANAL.**—The *Detroit Advertiser* has furnished us with the following statement of the total business of this canal for the years 1855 and 1856:

	Up freight.	1855.	1856.	Total.
Barrel bulk.....		76,488	119,259	195,727
Tons.....		4,373	11,563	15,941
Estimated value, except merchandise.....				\$1,500,000
Down freight.				
Copper, tons.....		3,196 $\frac{1}{4}$	5,736 $\frac{1}{2}$	8,923
Iron blooms.....		1,040	781	1,821
Iron ore.....		1,447	11,597	13,044
Fish, bbls.....		1,873	2,305	4,178
Valuation.....				\$2,875,080
Probable value of merchandise.....				1,600,000
Total.....				\$3,875,080

The receipts for tolls in the season of 1856 amounted to \$11,950 44. From an inspection of the list of up-freights, it appears that the agricultural resources of the Upper Peninsula are in process of development—for, while articles of merchandise have increased, pressed hay, in bundles, has fallen off in proportion of 4,465 for 1855, to 3,323 for 1856; and corn meal in the proportion of 2,467 bbls. for 1855, to 1,144 for 1856. Liquors, ale and beer are on a steady increase. The importation of potatoes has been less than 1,000 bushels in two years. Lumber to the extent of 395,295 feet, has passed upwards during the past season.

From another source we learn that a powerful steam-tug is now being built for the purpose of towing boats and vessels in the Ste. Marie River, where such a craft has been much needed. It will be under the charge of Capt. Abner Stone.—*Merchants' Mag.*



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int.	When Payable.	Where Payable	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Ln of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	173	Al x'ndria, Lon. & Hmp'sr	173	5,000,000.00					
498,800	6			1862-3	2d	54.55	Androscog'n & Kennebec	54.55	1,400,000.00			209,475.46	110,246.98	0000.
199,000	7	July & Jan.			Domesic.		Atlanta and LaGrange..	86.5	1,000,000.00	129,000.00	278,123.74	173,780.74	4 pr. ct. 6m	
52,416	6			now	"	12.5	B'ng'r, Old T. & Milford..	12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53	
500,000	7		N. Y.	1860	"	44 5-8	Boston & Worcester..	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,032.03	180000 4.6m	
500,000	7			1866	1st mortgage.		Buffalo & State Lino..		1,300,000.00				5 pr. ct. 6m.	
300,000	7			1857-9-62	Income.		"							
200,000	7			1864	Domesic.	30	"							
577,187	6			1872	4th mortgage.		Central Ohio..							
192,200	7			1874	1st mortgage.	43	Champl'n & St. Law'rence	43	1,872,800.00	1,001,087.00	162,200.00	77,700.00	10 per ct.	
380,000	7				2d		"							
1,440,000	7				Domesic.	110	Ch'r'l'te & South Carolina.	110	1,750,000.00	380,000.00	291,219.86	47 per ct. l.	\$72,300	
1,300,000	6-7-8		N. Y.	1864-7	1st mortgage.	138	Ch'go, Burl'ng'n & Quincy.	138	3,746,900.10	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m	
374,000	8			1868-76	2d		"							
					Convertible.		"							
1,300,000					1st mortgage.		Chicago, Fulton & Iowa.							
532,000					2d	5	Cin. Will'ng'n & Zanes'v'le	5	1,761,149.16	2,241,500.00	221,491.96			
104,000					3d	25	"	25						
305,500					"		"							
540,000	6				Income.		"							
43,000					Convertible.	103 1/2	Cleveland Col. & Cin.	103 1/2	4,741,220		1 3,754	700,804	6 per cent.	
400,000	7			1873	1st mortgage.	85	Cleveland & Mahoning..	85	1,500,000.00					
				1864	2d		"							
500,000	7			1873			Cumberland Valley.....	52	1,218,300.00		160,511.56	61,101.56	\$33,250.24	
500,000	6			1857-8-9	1st mortgage.	52	Dayton & Cin. short line.	52	1,000,000.00	1,000,000.00				
350,000	7				"	93 6-10	Eastern Railroad..	93 6-10	3,345,900.00		665,578.79	288,047.84	\$234,133	
740,000	7				1st mortgage.	130	East Tcn. & Virginia..	130	625,450.00		30,897.70	19,692.30		
88,000	10			1869	1st "	20	Essex Railroad..	20	700,000.00					
400,000	7			1861	2d "	109	Evansville & Crawf'd'v'le	109	2,228,657.50		243,970.43	136,061.90	\$133,281.45	
200,000	10			1864	1st mortgage.		The Fitchburg (Mass.) R.R.		3,540,000.00		681,162.53	213,837.81	3 per cent.	
					"	33	Fox River Valley..	33	800,000.00					
100,000	6				"	15	Fair Haven Branch..	15	300,000.00		50,381.23	14,822.45	\$166,240.00	
100,000	6				1st mortgage.	233	Georgia RR & Banking Co	233	4,156,000.00		1,068,202.54	357,689.42	\$166,240.00	
300,000	7				1st "	20	G't Falls & Conway R.R.	20			27,576.69	14,207.07		
4,000,000	6 1-9			1858	1st "	281 1/2	G't West'n R.R. of Can.	281 1/2	4,191,550.00		2,068,836.00		8 pr. ct.	
2,000,000	7			1869-70	1st "	74	Housatonic Railroad..	74	2,000,000.00		339,196.50	176,329.98		
1,812,000	7			1860	2d "	144	Hudson River..	144	4,000,000.00		1,924,382.44	718,037.40		
12,885,000	7			1875	3d mortgage.	144	"	144	4,000,000.00					
4,115,000	6			1875	1st "	139	Illinois Central R. R.	139	18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.	
3,000,000	7			1860	F 1d.	704	"	704	3,558,376.00					
600,000	7	Nov. 1.			1st mortgage.	72 1/2	Indiana Central.....	72 1/2			354,871.00		3 pr. ct.	
700,000	7	Jan. & July 1		1862	2d "		"							
50,000	7				1st "		"							
700,000	7				1st mortgage.	13	Iron R. R.	13	123,700.00					
					"		Kentucky Cen. 2d Div.		719,500.00					
218,000	7				1st "	32	Knoxville & Kentucky..	32	166,000.00		23,233.59	14,233.59		
1,000,000	7				2d "	184	Laurens (S. C.) R. R.	184						
1,000,000	6			1866	2d "	12 35	Louisville & Nashville..	12 35	300,000.00		50,234.71	14,149.13	\$8,000	
2,000,000	7			1875	2d "		Lowell & Lawrence		2,697,090.00		587,236.57		10 pr. ct	
2,500,000	6				1st "		Mad River & Lake Erie..		2,697,090.00			162,277.50		
2,000,000	7			1868	1st "	50	"	50	1,000,000.00				\$24,000	
60,000	7 and 8			1874	2d "	18 1/2	Manchester & Lawrence.	18 1/2						
420,000	8			1867	1st "		Marietta & Cincinnati..							
320,000	8				1st mortgage.	27	Mexican Gulf R. R.	27						
320,000	8			1881	1st "	30	Milwaukee & Horicon..	30						
6,000,000	6			1868	2d "	32	Mineral Point R. R.	32						
				1884	1st "	32	"	32						
500,000	7				1s mortgage.	497	Mobile & Ohio..	497	10,000,000.00		253,498.96	162,802.24	7 pr. ct.	
2,356,000	6	May & Nov.	N. York	1869	1s mortgage.	15	Nashua & Lowell R. R.	15	600,000.00		193,752.42	55,501.74	1 pr. ct.	
8,892,600	7	June & Dec.	N. York			55	Now Haven & Northm'tn	55	922,500.00				2 pr. ct. 6m	
3,000,000	7			1864	Coo. till 1859.	89	New York Central..	83 1/2	23,067,400	14,763,897	7,707,348	3,609,481	3 pr. ct. 6m	
936,000	7			1873	1st mortgage.	79	"				1,040,393.26			
411,700	6			1864	2d		N. Y. & Harlem R. R.	10 1/2	5,717,100.00			64,678.71	\$37,692.30	
500,000	7			1863	1st		"				245,713.00	51,544.40		
300,000	6				1st	66	N. Y., Prov. & Boston..	66	1,58,000.00		120,571.50			
					2d		N. Lon., Willim'tu & Pal.		1,700,000.00				\$25,000	
					"	5	Pontchartrain R. R.	5	500,000.00					
1,500,000	6				1st mortgage.		N. O., Opel'n's & Gr. West.		6,00,000.00		116,795.00	366,118.80	7 pr. ct.	
1,000,000	6			1873	2d	62 1/2	N. Y. & New Haven..	62 1/2	3,000,000.00		1,007,666.48			
2,000,000	6			1873	3d	103 1/2	North Western Va. R. R.	103 1/2						
1,500,000	7			1885	1st mortgage.		"							7 pr. ct.
3,000,000	7			1859	1st mortgage.	118	Northern (N. Y.) R. R.	118	2,000,000.00		600,000.00			
419,300	5				"	19 1/2	North Missouri R. R.	19 1/2			25,176.74	88,458.56	2 1/2 pr. ct.	
221,800	6			1877	1st mortg.	60	Norwich & Worcester RR	60	2,111,500.00		304,236.33			
				1860	"		"							
					"		Ogd'n'sb's, Clay'tn & Rome							
400,000	6				1st mortgage.	94	Ontario, Simcoe & Huron	94			259,690.10	137,875.93	5 pr. ct.	
1,200,000	6			1866	2d mortgage.	68 3/4	Orange & Alexandria R.R.	68 3/4	2,957,500.00		276,539.02			
300,000	7			1875	1st mortgage.	47	"	47	1,500,000.00					
300,000	8			1868	1st		Pcoria & Bureau Val. R. R.							
				1872	1st		"							6 pr. ct.
350,000	6				"	28 1/2	Philadelphia & Trenton..	28 1/2	1,000,000.00					
800,000	7			1861	1st mortgage.	47	Portsmouth & Concord..	47						
1,260,000	6			1864 to 1874	1st	76	Potsdam & Watertown..	76	2,000,000.00					
					"	62 1/2	Rutland & Washington..	62 1/2	950,000.00		62,525.42			
					1st mortgage.	86	St. Louis & Iron Moun. R.R.	86	6,000,000.00					
					"	168 1/2	Salem & St. Louis R. R.	168 1/2	400,000.00					
					1st mortgage.	116	Snd'sky, Mansf'd & New'k	116				19,050.64		
					1st	26	Sullivan Railroad..	26	500,000.00		75,246.06			
					2d		"					17,378.08		
					"		"							
					1st mortgage.	145	Tennessee & Alabama..	145			39,586.44		11m. 12 pr. ct	
					"	73	Terre Haute & Richmond	73	1,294,450.00					
				1861	2d	242	Toledo, Wabash & Western	242						
				1840	1st mortgage.		Troy & Boston..		1,000,000.00					
				1875	2d		"				</			



# LONDON QUOTATIONS OF AMERICAN STOCKS AND BONDS.

May 8th, 1857.			
Belvidere, Del., guar. 1st mort., conv. ....	@	88	
Chicago & Rock Island, Mort., conv. 1858, ..	"	"	
Ch. Ham & Dayton, 2d mort., ..	"	80	
Detroit & Milwaukee, 1st mort., conv. till 1865, ..		64	66
Eric, 3d Mortgage, 1883, ..		82	84
" Sinking Fund, ..		81	83
" conv. 1862, ..		73	75
Grand Trunk (Canada) Debenture, ..		90	91
Great Western " conv., ..		116	121
" " non-conv., ..		105	107
Illinois Central, 1st Mort., 7s., ..		90	91
" " with option 70 per cent. shares till Jan, 1859, ..		106	108
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..		86	88
Little Miami 1st Mort. not conv. 6's., ..	"	"	"
Marietta and Cincinnati, 1st Mort., ..		90 1/2	91 1/2
Michigan Central, conv., 8's, 1860, ..		90	91
do do do 1869, ..		90	91
N.York Central. No Mort. Not conv., 6's, ..		92	94
" " conv., 7's., ..		92	94
Ohio and Mississippi, 1st Mort., ..		68	70
Ohio and Pennsylvania, Income 1872, ..		68	70
Panama. No mort. conv. 1866, ..		88	89
Pennsylvania, 1st Mort., conv., ..		88	89
" " Sterling, 2d Mort., ..		91	93
Stenbenville and Ind., 2d Mort., ..		"	"

The quotations given are sterling quotations. The American values to be obtained by adding on exchange generally about 10 per cent.

## MONETARY AND COMMERCIAL.

The past has been a quiet week in money matters. The great railroad excursion has withdrawn attention on the part of our business men from loans and discounts, and the demand has fallen off considerably. Good paper has been readily negotiated at 10 to 12 per cent. in the regular houses, and in some instances lower. Confidence has materially improved. Abundant rains give promise of fair crops, and everybody is making calculations accordingly.

Eastern exchange declined to 1/4 @ 1/2 premium.

In New York capital is in fair supply, although shipments of specie have been large, and there has been a panic in stocks. The balance of specie in bank is over thirteen millions; undrawn deposits nearly seventy millions.

SALES AT THE NEW YORK STOCK BOARD—JUNE 8.			
\$30,000 Mississippi State 6's. ....	83 1/2		
4,000 Virginia 6's., ..	92		
500 California State 7's, 1870, ..	59		
1,000 Erie Railroad 3d mort. Bonds, 1883, ..	86		
16,000 Erie Railroad Bonds, 1875, ..	87 1/2		
8,000 Michigan S. S. F. Bonds, ..	72		
5,000 Illinois Central R. R. Bonds, ..	99		
16,000 Galena & Chicago 2d mort. Bonds, ..	77 1/2		
1,000 Hudson Riv. R. R. 2d Mortgage Bonds, ..	83 1/2		
100 shares New York Central, ..	83 1/2		
5 " Hudson River, ..	20		
5 " Mich. Cent., ..	92		
50 " Harlem R. R. stock, ..	10 1/2		
60 " Chicago & Rock Island, ..	93		
190 " LaCrosse & Milwaukee, ..	76		
100 " Panama, ..	93 1/2		
100 " Illinois Central, ..	139		
200 " Erie, ..	34		
100 " Reading, ..	78 1/2		
200 " Galena & Chicago, ..	90		
250 " Mich. S. & N. Ind., ..	48		
112 " Mich. S. & N. Ind. scrip., ..	83		
10 " do do p. stock, ..	83		
1900 " Cleveland & Toledo, ..	61		

**THE RAILROAD QUESTION SETTLED.**—We congratulate the citizens of Hennepin county upon the final passage of the Railroad bills through both branches of the Legislature. From the imperfect information we have been able to obtain, we regard it as certain that the arrangement of the various charters is extremely favorable to Minneapolis.

The Cedar Valley road, the Minnesota valley road, and the Northern Pacific road, all unite at Minneapolis, while the Red River Branch joins the main trunk of the Northern Pacific road at St. Anthony.

The well established fact that Minneapolis and St. Anthony are at the head of navigation from below, and at the foot of navigation from above, on the Mississippi, is fully recognized by the location of these important roads.

The United States Insurance Gazette gives a table of losses of American vessels for the month of April, as follows, viz :

9 Ships, valued at	\$285,000
5 Barques, " "	103,060
5 Brigs, " "	39,500
15 Schrs., " "	76,700

Total, 34 vessels, valued at - \$503,260

This statement does not include 3 ships burnt, valued at \$96,000—making 37 vessels, valued at \$599,200.

**MOBILE AND GIRARD.**—The *Columbus Sun*, of Saturday, says :

We have been informed by competent authority that Maj. John H. Howard, the President of the Mobile and Girard Railroad, started a corps of engineers a short time since, from the Union Springs, to run an experimental line from that place down the valley of Conecuh river, to a point on the Montgomery and Pensacola Railroad, about 30 miles distant from the latter place. When this line is finished it will place Pensacola within 10 hours' easy ride of Columbus.

We understand from the same authority that the project of running the Girard road to Mobile has been abandoned, as the City of Mobile has repudiated her subscription to the road, and hence the directors have in contemplation the connection of the Girard road with the Montgomery and Pensacola road. We learn, however, that there will be a road running from Pensacola to Blakely, immediately opposite Mobile.

## Safety of Passengers.

An act to secure the safety of passengers at railroad crossings, passed by the Thirty-sixth Legislature of the State of Maine :

AN ACT to secure the safety of passengers at railroad crossings.

Be it enacted by the Senate and House of Representatives in Legislature assembled, as follows :

Sec. 1. Whenever any railroad now constructed, or which shall hereafter be constructed, crosses or is crossed by any other railroad at the same grade, it shall be the duty of every engine-man on both of said railroads, when approaching the point of intersection with an engine attached to a train, or running without a train, before reaching such crossing, to stop his engine at some point within the distance of five hundred feet of such crossing, and when he resumes his course to pass at a rate not exceeding eight miles an hour over such crossing; and when two or more crossings on the same railroad are situated within four hundred feet of each other, one stop shall suffice for both.

Sec. 2. For every violation of this act, the engine-man offending shall forfeit and pay the sum of one hundred dollars; and the corporation on whose railroad such offence shall have been committed shall forfeit and pay the sum of two hundred dollars, to be recovered by indictment in the county where the offence was committed.

Sec. 3. This act shall take effect and be in force from and after the first day of May, in the year of our Lord one thousand eight hundred and fifty-seven.

Approved March 21, 1857.

From the Ontonagon Miner, April 4th.

## LAKE SUPERIOR MINING MATTERS.

From a private letter written by a gentleman whose opinions the worthy of great consideration, we learn a few particulars relating to the operations of some of the mines on the Point.

The Clark mine is looking well, is still showing considerable copper, though we believe it is the policy of the company to open largely before taking down the vein.

The star mine continues to show fair prospects of successful mining.

On the Kewenaw they are making examinations for different veins. There is nothing new or important that we can learn from the old works.

At the Central, several masses of some five or six tons each have been found in the lowest level.

The Garden City is doing well. They intend to put up stamps this season.

The copper Falls has taken a new start. A contract was let to work the east vein on tribute, and during the three weeks ending March 1st, they took out 20 tons of copper at a cost of \$1200, from openings made some time since. We learn that no other work has been done there since Nov. 1854. Sixteen tons of mass copper was raised after the contractor commenced work.—They are now taking down mass copper. One mass is estimated to weigh 30 to 40 tons. The contractor expects to get out 100 tons by the first of June, with 18 or 20 miners, and 25 to 30 surface men.

The Cliff have struck a remarkably rich ground in a low level near the slide. It is said to be as productive as any ever yet discovered in the mine.

**THE GREAT MASS AT THE MINNESOTA.** The cutting up of this wonderful piece of metal, is going on with all possible rapidity. 42 men have copper cutting contracts upon it. Six pieces have been brought to the surface and weighing respectively 6,200, 3,431, 7,574, 5,412, 3,491, 1,925, about 14 tons—the pieces averaging more than 2 1-4 tons. Probably 50 tons of copper have been cut from the great mass, a part of which are thus lying in the level and will soon be taken to the surface and weighed off.

The work on the Superior and Flint Steel Mines, has been retarded for several days by the water coming upon them from the surface in consequence of the Spring thaw. They have been compelled to stop sinking all their shafts for several days.

The Rockland product for March is about 22 tons.

At the Norwich they have struck new and important masses. One in the back of the IV level, is uncovered for the height of two stopes—24 feet, and still going up.

## Improvement in the Manufacture of Iron.

In the present modes of manufacturing iron, many of the impurities which become combined with the metal in its descent through the blast furnace are further incorporated with it in the puddling furnace; and being incapable of removal by any of the subsequent processes, remain to deteriorate and weaken the finished metal. It is true that some of our principle iron works, and particularly the Low Moor Works, are at this moment producing iron of very excellent quality; but, at the same time, it is unquestionable that the purest iron produced, even at those works, is susceptible of further refinement.

Mr. Sanderson's objects, in effecting his improvements, were, first, to separate and discharge from the crude iron, whilst in a fluid state, all the deleterious non-metallic matter contained in it; secondly, to obtain a metal of great purity, by running out the metal from the furnace in which it is refined, and thus allowing the metallic matter and scoria to separate, leaving a purified metal suitable for subsequent manufacture. In carrying out his invention, he uses a common reverberatory furnace, and either melts pig iron upon the bed of it, or draws the molten mass direct from the blast furnace. When the metal comes to rest in the reverberatory furnace, the slag is skimmed from the surface, and a chemical re-agent, capable of disenga-



ging oxygen during its decomposition, is then added. Carbonic acid or carbonic oxide gases being thus produced, the oxygen contained in them combines with the carbon of the fluid iron, and the combined gases either pass off as such, or react upon the silicon, sulphur, phosphorus, arsenic, and other impurities of the fluid iron, separating them from the metallic part, and allowing the earthy matters to flow away as slag containing but a very small percentage of iron. This is essentially the whole of the improved process, which differs from previous inventions in which chemical compounds have been introduced with the pig iron into the puddling furnace, inasmuch as it discharges the earthy matters, instead of merely forming new combinations of them.

The new process is not a mere theoretical improvement, but has been practically tested in the manufacture of many hundred tons of metal, and has resulted in the production of an iron having greater strength and tenacity, superior hardness, higher specific gravity, and clearer and purer color than any that we have before seen, this opinion being based upon an inspection of numerous specimens, comprising a variety of finished articles, from cast iron bells of the finest tone down to drawn wire of the most pliable character.

#### THE FRENCH R. R. FRAUD.

The following is the history of this crime, as given in the report of the U. S. Commissioner to the Secretary of State. Carpentier, the principal, returned voluntarily, and the Commissioner has just decided that Louis Grelet must be given up under the treaty with France:

The circumstances of the alleged offences, as claimed by the prosecution, are briefly as follows: The Northern Railroad Company are a corporation in France, duly incorporated, and controlling extensive lines of railway in that empire. They have offices in Paris, and at night a watchman named Guerin was employed by them to sleep in those offices to guard them against robbers. Their capital is 400,000 shares (livres) of 400 francs each. The certificates of stock are divided into series, each series into — numbers, and, unlike ours, are payable to bearer, and thus are transferred by mere manual delivery, without the necessity of any transfer on the books of the company. To those certificates are annexed two classes of coupons—one an interest coupon of four per cent., payable each year on the 1st of January—the other a dividend coupon for an amount contingent upon the earnings of the year, and which is payable on the 1st of July each year.

It has been the custom of the company, as a matter of accommodation to its stockholders, to receive their certificates of stock for safe keeping, and those certificates were deposited in a safe in the cellar, of which one of the chief Directors (Administrateurs) of the company always retained a padlock key, without which none of the officers could open the safe. At each half year, when payments of interest or dividends accrued, each stockholder who retained his certificates of stock prepared a schedule or statement (called by them a *bordereau*), describing the series and number in series of each of his shares, and the amount due, headed with his name and the date of presentation. Upon presenting this *bordereau* at the company's office, a receipt was given for it to the stockholder, postpon-

ing him to a future day for payment, and the clerk, taking this *bordereau*, placed it in a cover or envelope (called by them a dossier). These dossiers were numbered consecutively, and the dossier number was put on the *bordereau* inclosed in it, to identify and connect the two. The company has a blank book prepared for each semi-annual payment, in which there is a blank square, corresponding to the series and number of each share of stock, which book is called the *Livre de Passe*; and one of the clerks, taking each dossier, enters into each blank square of the *Livre de Passe* which corresponds to the series and numbers detailed on the *bordereau* a reference to the number of the dossier under which payment of the interest and dividends upon those shares had been demanded; and the clerk draws with his pen a line under each number detailed in the *bordereau*, when the entry has been made from it into the corresponding blank square in the *livre de passe*. It is evident thus that if the clerk, on taking up the dossier for examination, should find the squares in the *livre de passe*, which corresponded to the numbers on its *bordereau*, had been filled with figures referring to other dossiers, he would detect at once mistake or fraud; and, by turning to the dossier referred to in this square, could discover who had received the former payment. It is also evident that the lines under the numbers on the *bordereau* indicate that such an examination had been made, and that there had been found no mistake or fraud, and that the *bordereau* should be paid. The company kept also another book in connection with the half-yearly payment, called the book of registry of dossiers ("*Livre d'enregistrement de dossiers*"). In this, after payment was made of each *bordereau*, the clerk entered the amount of the payment, the date, the name of the payee, and the number of the dossier inclosing the *bordereau*. This entry occupied a line, and each entry was numbered consecutively, and these "order of registry numbers" were also put on the dossiers under the dossier number, from which they might vary greatly; as a stockholder who presented his *bordereau* on the first day of payment of the interest, and who then would have it placed in a dossier bearing a low number, might, from neglect or caprice, not come for the payment of his interest for several months, and it would thus not be registered as paid in the *livre d'enregistrement* till after several thousand other dossiers. The company relied on these two numbers of the dossier and of the order of registry, both of which appeared on the dossier, to enable them to determine by their book when and to whom payment had been made, and to what amount. By altering, then, the number of order of registry on a dossier to a later number, an officer of the company could procure its insertion twice in the company books as paid, and could thus cover a deficiency in the cash account to that extent.

The foregoing is the manner in which a stockholder who retained his own certificates would procure the payment of his coupons. As to those which were deposited for safe keeping with the company, the clerks made out the *bordereaux* and dossiers, bringing up the certificates for that purpose from the safe in the cellar; and thus it happened that, for a few days at each half-yearly payment, these certificates were placed temporarily in the wooden desk (*armoire*) of the cashier.

Mr. Robert was cashier up to May, 1856, when he died. Carpentier, who had been sub-cashier, was thereupon made cashier, and

Louis Grelet, who had been chief clerk in the department of the deposited certificates, was made sub-cashier, but did not change his duties. Parot was not an employee of the company, but was a stock-broker in Paris. In August, 1856, Carpentier fled. Before his flight was known to the company Louis Grelet fled also, and finally Parot fled, coming to America in company with Grelet, all under assumed names. After the flight of these parties, on examination it was discovered that 5,752 shares had been abstracted from the company, and, as the market value of the shares had risen from 400 francs to over 1,000 francs, it results that the loss was over a million of dollars. There were also found upon the *armoire* or desk occupied by Mr. Robert, when cashier, lever marks, indicating that it had been forced.

It is alleged that the accused, either as principals or accomplices, stole these shares, by breaking this *armoire*, or by entering the large safe in the cellar with false keys; that the thefts were concealed by the fraud of marking *bordereaux* in such manner as to induce the clerks to consider them duly registered, without examination, and by other frauds; and that thus double payments were made on these abstracted shares: first to the stockholder who had deposited them, and secondly, to the persons to whom they had been sold or pledged by the accused. Parot is charged with being the chief agent in selling or pledging the stolen shares, for which his occupation of broker gave him peculiar facilities. It is also alleged that in two instances Carpentier and Grelet falsely altered dossiers in cases where the shares had not been abstracted, to cover up a deficiency in the cash account, or to take from the cash account a sum equal to that demanded by the *bordereaux* inclosed in these dossiers.

**RAILWAY LIGHT SIGNAL.**—In the description of this invention, read before the Royal Scottish Society of Arts, it is stated to consist of a stationary, clear light, placed at the beginning of any tunnel or course, or near to a junction. Every passing engine changes the light to a red color, which disappears gradually in ten minutes. The smallest glimpse of red light will caution the conductor of any approaching train that there is danger of running into another train not far in advance. The proximity of the latter to the lighthouse may be estimated from the perpendicular degree of the red light observable.

**J. T. CRAPSEY,**  
**ATTORNEY AT LAW,**  
OFFICE:  
N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

G. W. MORRILL. G. B. BOWERS.  
**MORRILL & BOWERS,**  
Successors to and members of the late firm of  
C. WASON & CO.  
CLEVELAND, OHIO,  
Are prepared to execute all orders for  
**Railroad Cars of Every Description.**

WITH PROMPTNESS AND FIDELITY.  
Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.  
Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.  
apl6



**GENERAL**  
**RAILWAY SUPPLY AGENCY.**  
**SNOOK & HILL'S PATENT**  
**LOCOMOTIVE LAMPS,**  
 83 Liberty Street, Cor. of Broadway,  
 NEW YORK.

**JOHN W. KELLY,**  
**MANUFACTURERS' AGENT,**

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**

**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

**BUSH & LOBDELL**

Wilmington - - - - - Delaware.

MANUFACTURERS OF

**CHILLED WHEELS**

AND

**TIRES,**

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extant

FOR THEIR

**CELEBRATED WHEELS,**

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

**WHEELS FITTED**

To Hammered or Rolled Axes.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

**TO PRINTERS.**

**Large Cylinder Hoe Press**  
**FOR SALE.**

WE offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,600 if application is made at once.

Address

WRIGHTSON & CO.,  
 167 Walnut street, Cin'ti, Ohio.

N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.

ap8-1m

W. & CO.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
 W. G. HYNDMAN,  
 41 East Second street, Cincinnati, O.

ap23

**Railroad Iron.**

2000 TONS RAILS, Erie pattern, weighing about 56 lbs. per yard, in port and to arrive; for sale in lots to suit purchasers, by

my8-1m

M. K. JESUP & CO.,  
 44 Exchange Place, New York.

**FOR SALE.**

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address

ap8-1m

WRIGHTSON & CO.,  
 167 Walnut street, Cin'ti, Ohio.

**SILVER, GOLD, LEAD,**

And Other Minerals,

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth to a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,

Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O.

**Norris' Locomotive Works.**



PHILADELPHIA.

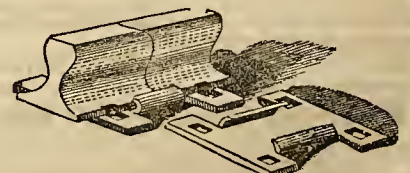
ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

Jy.27. RICHARD NORRIS & SON.

**RAILROAD SPIKES.**



WROUGHT IRON

**Chairs and Fastenings.**

THE undersigned will continue to manufacture with increased facilities, HOOK & FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &c., &c.

The best quality of refined iron is used, and all orders filled with dispatch.

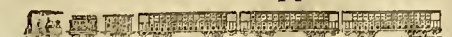
J. HOPKINSON SMITH

No. 25, South Charles

Please direct the name in full.  
 Baltimore August 31-1



## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup't.  
Racine, May 15, 1857.

H. S. DURAND, President.  
May 21

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience is car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern-roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Is engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all proposals made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
Louisville and Frankfort Railroad.

ajr2

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan-ty] Agent.

## PRATT & FREEMAN. PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps.

Machinery and Machinists' Tools,  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns.

Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets

Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,

Dudgeon's, Burroughs', and Ball's Patent Jack Screws

Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,

Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,

### CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED. oc23-1y

## E. MENDENHALL, MAP, BOOK & PRINT SELLER,

Has constantly on hand  
GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND  
OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,  
Geological and Astronomical Charts, Globes,  
MICROSCOPES, TELESCOPES

DRAWING INSTRUMENTS, &c.  
Publisher of the

Railway Map of the Western States,  
In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO  
the LARGE MAPS OF CINCINNATI, and HAMILTON Co.  
Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA

MAPS OF EVERY DESCRIPTION.  
mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

### Lathe Mandrels, Gauges

of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated heats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut St., Cincinnati.  
N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish  
SPECIFICATIONS, ESTIMATES, AND PLANS,  
in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description;

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYE

METALLIC SELF ADJUSTING CONICAL PACK-

ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,  
Consulting Engineer,  
64 Broadway, N. Y.

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation esti-

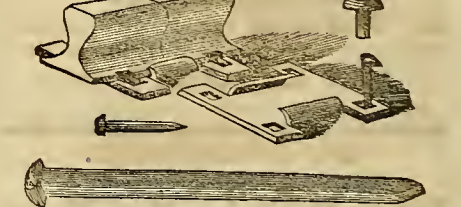
mated and reported in detail. Topographical drawings

executed and Lithographs supplied by skillful artists.

Mines explored, new Works laid off, and Geological

plans prepared. mar1-ly

## GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 281 & 283 West Front street, Cincinnati, Ohio.

Please direct name in reply.  
feb 28 CORLEY, GOSSIN & CO.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

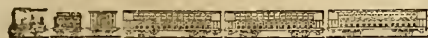
WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:10 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company,

- 47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducting. Sold at wholesale at great discount from list prices.

oc23-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI

AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 2:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jyl7

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan2

1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:20, 4 and 6:30 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities. Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M. INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

## NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M. MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburg, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via Clyde, through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train, which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:20 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:20 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.**

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8 A. M., and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 8:15 and 10:25 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Frght. Ag't.

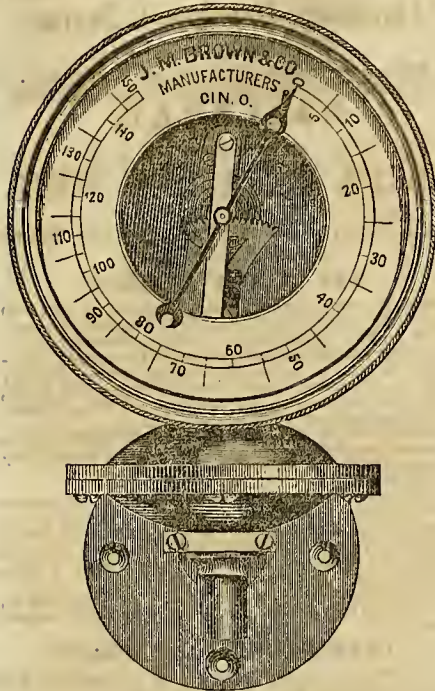
Indianapolis, Sept. 16, 1856.

[mh29-1y.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.  
THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



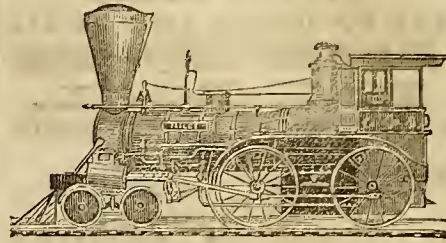
## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
DRILL THE TUBE-PLATES  
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## LOCOMOTIVE WORKS.



### NILES & CO.,

CONGRESS STREET, CINCINNATI,  
BUILT to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-6m.

### RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

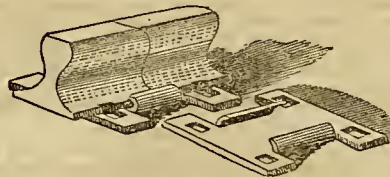
### A. B. LATTAS

Patent Mercurial Steam Gauge,  
HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

apl7 A. B. & E. LATTAS.  
J. D. GREEN, C. A. GREEN.

### CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,  
WE have in use improved machinery, capable of turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line,  
J. B. GREEN & BRO.  
Feb. 14 ly.

## THE SCHENCK MACHINERY DEPOT

AND  
Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

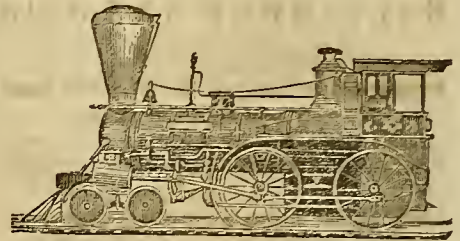
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR  
Aug. 9 ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

LOCOMOTIVE ENGINE LANTERNS,  
From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.  
ENAMELLED HEAD LININGS  
Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes. Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.  
Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,  
Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
foc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

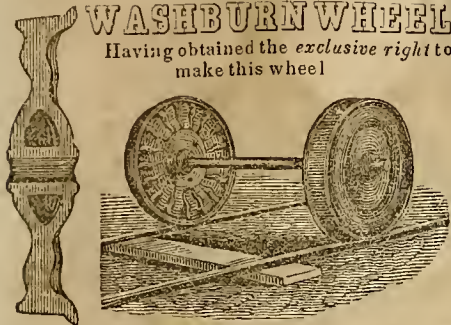
Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.  
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEAL. (The highest prize) awarded to these pumps a team Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855 - 1



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

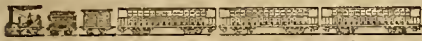


**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are now to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Janl. Muskingum Works, Zanesville, O.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL

## DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,**  
**MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16<sup>th</sup> JOSEPH DAVENPORT.

## S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j NEWARK, N. J.

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or  
Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

## ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
**LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,**  
120 Water Street New York.

## RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, 35j 3 College Hall, Cincinnati O.

## RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July 31

## THOMAS D. STETSON, Mechanical Engineer,

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc23

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
aug14-ly President of the Board.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern. 56 to 59 lbs. per lineal yard, now at New Orleans, for sale by

feb19-1m **VOSE, LIVINGSTON & CO.,** 9 South William street. N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,**

no13 10 Wall st., near Broadway, New York.

## IRON BOILER FLUES, PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ¼ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc. Warehouse, 55 South Third St., PHILADELPHIA. [aug

## RAILROAD IRON.

**LOCOMOTIVES.**  
4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.] **A. H. GOODMAN & CO.,** no. 7 Wall st., N.

## RAILROAD CAR AND

## COACH TRIMMINGS.

## DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**

## IMPORTERS OF

**Plain and Figured Mohair Plush**  
Printed and Unent do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Enameled Cloth, for seats & backs of Cars**

**ROPE MATTING, Every Width**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in bond for exportation  
septs **DOREMUS & NIXON**

## RAILROAD RECORD,

## BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park St., Baltimore.

jc4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb5-tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

dec11 Second avenue, corner of 22d street, N. Y.

**T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,**

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened, the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS, Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-ly 119 Walnut st., Odd Fellows' Building

**The Great Arnold Secret Discovered at Last**

**BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**



edgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton &amp; Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,**

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,  
Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLEYS and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap3

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.

ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 258 H Street, Washington, D. C.

ap12

**Thorough Bred Stock FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,****"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JUNE 18, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 17.

#### EDITORIAL.

Russia—Its Population, Manufactures and Commerce .....	269
New York & Erie R. R. ....	270
Brevities .....	270

#### RAILROADS.

St. Louis & Iron Mountain R. R. ....	270
Texas Central Railroad—Austin Branch .....	272
Mobile & Ohio R. R. ....	273
Pensacola R. R. ....	273

#### MISCELLANEOUS.

Overland Mail to the Pacific .....	272
Earnings .....	273
Suez Ship Canal .....	273
Railroads in Canada .....	273
The Area and Resources of Russia .....	274
Hudson's Bay Territory .....	274
Common Carriers .....	277
State of Maryland vs. The Baltimore & Ohio R. R. Co. ....	277

#### MONEY AND STOCKS.

Table of Stocks and Bonds .....	276
London Quotations .....	277
Monetary and Commercial .....	277
Sales at the New York Stock Board .....	277
Cincinnati Stock Sales .....	277

**MOSELEY TUBULAR BRIDGE.**—One of the Moseley Tubular Wrought Iron Arched Bridges has just been erected over the Canal on Vine street, in this city. We have not the details of weight, space, &c., but from an inspection of the bridge itself can say that it is one of the most beautiful light and substantial structures that we have in this city.

**CORRECTION.**—In our letter of last week from R. R. Celebration at St. Louis, we were made to say that the guests to this celebration were invited to ride free over 83,961 miles of Railroad. This has the figure 1 more than we wrote, and should have been 8,396 miles, or one-third the total number of miles of railroad in our country. If we assume that each guest had used his ticket to its full extent (which it was utterly impossible to do in the time given), the railroad fare of the guests to this celebration at two cents per mile, would have been \$419,800.

VOL. 5.—No. 17.

### RUSSIA—ITS POPULATION, MANUFACTURES AND COMMERCE.

The United States Government have recently published a very valuable work, entitled "COMMERCIAL RELATIONS," for which we are indebted for a copy to the Hon. J. SCOTT HARRISON. The first volume, entitled "Digests" is just issued, by the Government Printer. In our opinion, it is one of the most valuable documents among the large number published, by the government. The article on Russia which we shall take for our text, supplies the latest and most authentic information we have on that country. In reading it we perceive at once that Russia has greatly advanced in a few years; but, it is also evident that its vast extent impairs its strength. Its area and population are expressed in the following table.

#### RUSSIA IN EUROPE.

Dominions.	Area.	Population.
Great Russia.....	398,781 square miles.....	20,403,871
Little Russia.....	150,141 " ".....	11,775,865
New Russia.....	96,636 " ".....	3,259,612
Poland.....	49,230 " ".....	5,156,543
We tern Provinces.....	47,076 " ".....	2,870,667
Baltic ".....	36,616 " ".....	1,761,867
White Russia.....	70,399 " ".....	2,937,436
Cossack Districts.....	123,777 " ".....	1,156,766
Finland.....	135,809 " ".....	1,499,199
Northern Provinces.....	56,226 " ".....	1,420,629
Ural Provinces.....	447,788 " ".....	10,770,181

In Europe 2,022,478 square miles 63,012,146

	RUSSIA IN ASIA.
Caucasus.....	86,573 square miles.....2,850,000
Siberia.....	4,803,147 " ".....3,737,000

In Asia 4,889,725 6,587,000

	RUSSIA IN AMERICA.
North Pacific.....	371,350 square miles.....61,000
Grand Total 7,282,553 " ".....69,660,146	

The reader will observe, that the whole strength and resources of the Russian Empire are in the first nine provinces of Europe, and the first one in Asia. The area and population of these are

Area.....	1,125,042 square miles.
Population.....	63,671,336.
50 persons to a square mile.	

But over what a wide waste of uncultivated, and uninhabited land does that Empire rule! About six millions of square miles are left with only about fourteen millions of people! Less than three to a square mile, and when we separate Siberia, five millions of square miles with less than one to a square mile!

That part of Russia, however, which is tolerably well populated, viz: Great Russia, Little Russia, White Russia, and Poland, has advanced very much in the arts of civilization, and presents to the world a power about equal to that of France. In all that relates to Commerce, Navigation and Manufactures and Science, it is far inferior to Great Britain or the United States.

The Agricultural productions of Russia, vary over its vast surface, and various soils. Its inhabited parts are, however, of a cold, northern climate, hence its chief productions must necessarily be Cereals, Grass, and Animals. The common food of the peasantry is *Rye*, and that is the principal kind raised. The amount and value of grain productions is thus stated;

Bushels of Grain.....	1,495,000,000
Value.....	\$720,000,000

This is about 20 bushels of grain to each person.

When we allow a total of grain, and bread-stuffs of eight bushels to each person, two bushels for seed, and a sufficiency for the immense amount of animals maintained, and also the large amount exported, this is, perhaps, not too much. But it is unquestionably much beyond what is usually allowed by staticians.

The cultivation of the *beet root* for purposes of sugar has, of late years been commenced, and seems to have made much progress. In 1848 the amount of beet root sugar made was 32, 240,000 lbs.

Tallow and wool are large exports from Russia. Of wool, the amount exported annually is about 18,000,000 lbs. The number of Sheep and Goats in Russia is about 37,000,000. Russia however does not raise very fine wool, and cannot compete with Australia in the production of coarse.

The Manufactures of Russia are yet in a crude state, but it is quite remarkable, that in some things she exceeds all other countries. *Russia Leather*, used for book binding is yet unexcelled, and she has a monopoly in that department. So Russia Sheet Iron is of superior quality. Her Glass Factorics are also in high repute. Single plates have been manufactured in the St. Petersburg Glass Works, which brought \$3000,00 apiece. The Hemp and Flax manufacture is immense. The aggregate manufactures are thus represented;

Persons employed in Manufactures.....	6,064,700
Total Value.....	\$364,500,000

This shows the population in Manufactures and the Arts to be 1 to 11 of the whole. In the United States the population is 1 to 5, which shows that Russia has by no means advanced as far in manufactures as the United States. Of the six millions of persons so employed, about two-thirds are employed in hemp and flax.

The City of Moscow is the great center of the Industrial pursuits; this explains the fact of its magnitude and splendor without foreign commerce.

The following are some of the leading manufactures of Russia, in regard to these articles, which are exported. It is taken from official documents for the year 1852.

Establishments. Value of Property. Workmen.			
Woolen Cloths, 414	\$14,500,000	86,443	
Woolen Tissues, 130	4,000,000	13,846	
Cotton Yarns, Threads 55	12,000,000	30,976	
Cottonsades 440	12,000,000	81,451	
Silks 532	4,000,000	15,982	
Iron 637	6,000,000	44,000	
Tallow and Candles, 1,927	7,500,000	6,500	

These are only examples of the larger classes of Russia Manufactures. The Government has 1,321 factories, giving employment to 129,154 workmen. These establishments are chiefly located in Moscow and St. Petersburg.

In Commerce, the exports and imports at their highest point, did not exceed two-thirds that of the United States; which shows that the proportion to the population is not over one-fourth. This commerce is carried on by 17, 100 vessels.

These facts show, that while Russia has advanced in certain departments of commerce and manufactures, yet taken as a whole, she is like a huge animal of great power and size, but uncultivated and unregulated. Over two-thirds



of Russia, there neither is, nor can be any other dominion but that of ice and barbarism. We may readily admit any moderate degree of civilization and refinement in the region of Moscow and St. Petersburg, and yet see the impossibility of the great northern deserts of Russia ever becoming anything else than barbarous. If Russia had the same ratio of population that Massachusetts has, she would have *seven hundred million of inhabitants*, and had she the population of England, she would have a vast many more than the whole earth contains. But, behold, she has not *one-tenth* the density of Massachusetts, nor *one-twentieth* that of England.

It is a mistake, we believe, to imagine any danger to southern Europe from Russia. She is an empire of immense extent, but of very feeble resources, as compared with her extent and pretensions. Civilization on a small scale is much more powerful than barbarism on a large one.

#### NEW YORK AND ERIE R. R.

This road is again going through the ordeal of a thorough canvassing by the public press. A few months ago its former Superintendent, D. C. McCallum, after having received the most extravagant laudations from the New York dailies was indiscreet enough to embroil the road in a quarrel with the operatives which resulted in the obstruction of its business, the loss of long tried and competent servants and the destruction of public confidence. We believe that we are not far from correct when we estimate that this one operation has cost the Erie road a million dollars. Mr. McCallum was constrained to resign. The public then expected that some other man of long experience and position would be appointed to succeed Mr. McCallum and devote his whole time to the healing of the breaches thus made. Instead of this, the Board have placed upon Mr. Ramsdell the President of the company the duties of Superintendent. Mr. Ramsdell is assisted by two Division Superintendents. To this the New York press object. 1st, That Mr. Ramsdell is engaged in a mercantile business in which his interest as a transporter and his duty as a superintendent will conflict. 2nd, That he is interested as a contractor in the Long Dock which the Erie Company agrees to lease and pay interest on its cost. 3rd, That Mr. Ramsdell's occupations and pursuits have not fitted him for the duties of the Superintendency. That this position needs a practical knowledge of the mechanical operations of railroading which Mr. Ramsdell has not had the facilities of acquiring.

These are three strong points and to our mind should, if true, settle the question. We trust that Mr. Ramsdell's acceptance of these duties is but temporary till some suitable person can be procured, or that he will cast aside all other connections and devote himself to his duties to the road and it alone.

#### BREVITIES.

—**MORRIS AND ESSEX R. R.**—The annual meeting of the stockholders of the Morris and Essex Railroad, was held at Newark, N. J., on the 10th inst. The receipts of the year amounted to \$251,426, and the working expenses \$132,751, leaving a balance of \$94,335 after the payment of \$24,339 interest. The number of passengers carried during the year was 412,630. The report refers to the projected extension of the road to the Hudson River a supplement to the charter authorizing which was obtained from the last Legislature, and which, it is stated, can be constructed for \$650,000. It also alludes to the necessity of constructing an extension from Hackettstown to Phillipsburg, the route for which was recently visited by a portion of the stockholders. Some difference of opinion existing among the stockholders in relation to these extensions, further investigation was ordered before the work shall be entered on.

—**PENSACOLA AND MONTGOMERY R. R.**—On the afternoon of the 21st ult., for the first time, says the *Montgomery Mail*, the puffing and snorting of the *Iron Horse* was heard upon the iron track of the Montgomery and Pensacola Railroad—two "tenders" were hitched thereto, which were crowded with enthusiastic citizens, who were anxious to take the first ride by steam on the road. We learn from a gentleman who was along, that the locomotive—the *Mims*, by name—took the party a mile or more down the track and back again, in handsome style, the road answering admirably.

This engine will enable the contractors to lay down the rails very rapidly, and facilitate the work in various ways. It will not be long before we may expect to take a ten-mile ride in the direction of Greenville.

—**MARIETTA R. R.—DAYTON BRANCH.**—The Marietta Republican of June 12th says: A corps of engineers are now making a preliminary survey of a line of railroad from Xenia to Greenfield, a point on the Marietta road. This line, we believe, is what was once called the Dayton, Xenia and Belpre railroad; but which was abandoned at the time of the consolidation of the Marietta & Cincinnati, and Parkersburg, Hillsborough & Cincinnati railroads. Fourteen miles of this branch of the Marietta road is finished, and the remaining forty miles will be completed as soon as possible. This road, together with the Hillsborough "side track," will be of great advantage to our road and to Marietta.

—**PENNSYLVANIA PUBLIC WORKS—SALE OF THE MAIN LINE.**—The sale of the main line of Public Works of Pennsylvania is not to be accomplished without opposition although a bill for that purpose has twice passed the Legislature of that state. In the former instance it failed for want of purchasers. In

the present case an application has been made for the Supreme Court of the State for an injunction to restrain the Governor from making the sale. The case is to be argued on the 20th. If the injunction to prevent the sale fails, it is proposed to apply for an injunction to the same tribunal to prevent the Pennsylvania railroad from buying.

—**LITTLE MIAMI R. R.**—A. H. Lewis, Esq., has been appointed Superintendent of this road to succeed Mr. W. H. Clement transferred to the Ohio and Mississippi R. R. Mr. Lewis has been connected with the road a number of years, and his appointment gives general satisfaction.

—**NEW ALBANY & SALEM R. R.**—This road is to pass into the hands of a Trustee.

—**CINCINNATI & CHICAGO R. R.**—The formal opening of this road from Richmond to Logansport will take place on July 3d.

—**VERDICT FOR INJURIES.**—A verdict of \$5,300 has been rendered in the Court of Common Pleas at Canfield, Mahoning Co., O., in the case of Norman S. Way vs. Ohio & Pennsylvania R. R. Co., for injuries sustained by a collision on this road Dec. 3, 1855.

—**COAL IN NEBRASKA.**—The Council Bluffs Eagle says:

**STONE COAL.**—We have, through the politeness of Mr. Griffin, just received a specimen of stone coal, found within two miles of Omaha, Nebraska. It proves to be a fair article of bituminous coal. The vein is about two and one half feet thick, at the opening or surface.

## Railroads.

#### ST. LOUIS & IRON MOUNTAIN RAILROAD.

The following is the past history of this Company, as taken from its last annual report:

"The act of incorporation, which was mainly the renewal of an act passed in 1837, chartering the St. Louis & Bellevue Mineral Railroad Company, was approved in 1851.

"The St. Louis & Iron Mountain Railroad Company was organized in November, 1852; a Board of Directors was elected in January; the surveys, which were immediately ordered by the Board, were reported in March; the contracts were advertised in July; work commenced in the fall, under Holmes, Shanahan & Green, who had contracted for a small portion of the work immediately below St. Louis.

"In February, 1854, nearly the whole line, from the terminus of the Holmes & Co. contract, was let to Messrs. Wm. M. Watts & Co., and, subsequently, that firm having bought out Holmes, Shanahan & Green, became the responsible contractors for the whole line, with the exception of the Meramac section, for which Conran & Bennett had contracted,



and sections fifty-nine to sixty-two, at the Iron Mountain, let to Messrs. Harrison & Co. This contract included everything for the completion of the road, except the furnishing of rails, chairs and spikes.

"It will be necessary to detail the condition of this contract: The line was to be completed to Big River by the 1st of July, 1856, and to Pilot Knob by the 1st of December, 1856. Fifteen per cent. of the monthly earnings was to be reserved, as a guarantee to the company. Payments were to be made in the bonds of the city and county of St. Louis and the bonds of the State. The par value of the bonds being made good by an allowance from the company of five per cent., together with an additional allowance of five per cent., provided the work was completed within contract time.

"Notwithstanding the fulfillment by the Board of Directors of their part of the contract, the Messrs. Watts & Co. carried on the work in a slow and unsatisfactory manner.

"They sub-let the work at low rates. The Board had no control over the sub-contractors, who were only responsible to Watts & Co., and in several instances the work was abandoned, because it was not profitable to those engaged in executing it. It may be remarked at this point that the prices paid by Watts & Co. to the sub-contractors were actually 20 per cent. lower than the price which they themselves received.

"This state of things was detrimental to the reputation of the company, as well as to the advancement of the work, and when your present Board entered on the discharge of their duties, they resolved to put a stop to it.

"They perceived that a radical change was necessary. After a protracted negotiation, they succeeded in annulling the contract with Messrs. Watts & Co., procured a transfer of their sub-contracts direct to the company, thereby regaining immediate control over the work.

"Thus the sub-contracts were transferred to the company, which consequently took the place of Watts & Co. It was apparent that the difference in price which existed between Watts & Co. and their sub-contractors was too great, and that, in consequence, progress would be impeded, as it had been; and your Board, therefore, raised the sub-contractors' prices to paying rates, although the new schedule still left a fair margin between the prices paid and that which obtained between the former Board and the Messrs. Watts & Co. The results of the change were soon apparent; the work progressed and continues to progress rapidly, and your Board feel authorized to state that the double benefit of having more work done in the same time and at a reduced expenditure has resulted from the abrogation of the contract with the Messrs. Watts & Co.

"The total value of all the work done by

contractors up to the expiration of the last fiscal year, embracing a period of three years, was \$662,805 63, including the reserved per centage.

"The total amount of disbursements, including the foregoing, was \$759,123 65. The expenditures under your present Board for the current fiscal year is \$1,505,633 56. There has been, therefore, \$746,509 91 more expended this year than in the three years preceding.

"The whole expenditure, up to the termination of the current year, is \$2,264,757 21, nearly two-thirds of which has been laid out under the supervision of your present Board of Directors.

"The great advantage of compressing twice the amount of work done in three years into one year are obvious to general understanding. It enhances the reputation of the company, saves large sums in the salaries of the engineering and official staff, and, by bringing the results confidently and justly anticipated from the completion of the road so much nearer in time, gives the stockholders the earnings of the road for that period.

"For instance, if the road, under the policy inaugurated by the present Board, be completed two years sooner than it would have been under the policy previously acted upon, the stockholders profit by it to the amount of the net earnings for that period. Besides this another great gain is secured—for the more protracted the exposure of the work to rains, and the action of water, the more expensive its completion becomes.

"The energetic prosecution of the work involved the application of the fiscal resources of the company to the work on the same large scale. Hence your Board, through the instrumentality of your President and a Director, Mr. Henry T. Blow, effected a negotiation with a distinguished house in New York, by which they procured an ample supply, realized from the proceeds of sales of the company's securities, or by advances upon them when the condition of the stock market would not justify a sale, paying at the rate of seven per cent. per annum only for the amounts advanced. By this arrangement, in connection with reduction of rates in present contracts, compared with those paid to Messrs. Watts & Co., the sum of one hundred and sixty-one thousand eight hundred and thirty-seven dollars has been saved to the company, as appears from the revised estimates of the engineer, which have been made on the basis of the prices at which all the work is now let. In looking at the revised estimates, it will be seen that the reductions are mainly under the heads of graduation, masonry and track-laying. In superstructure and bridging there is an increase under the revised estimates of \$42,000, and in engineering the large sum of \$30,000.

"Your Board, after consulting the report of the engineer on the present and prospective condition of the work, feel authorized in giving you the most satisfactory assurances. In the first place, the rails are all purchased under the contract made with Messrs. Wood, Morall & Co., of the Cambria Works, at Johnstown, Pennsylvania. Nine thousand tons, the necessary quantity, has been provided. Four thousand tons have been received, and the residue will be delivered when the navigation of the Ohio river permits its shipment.

"Judging from the promptness with which this enterprising company has complied with its engagements up to the present, no delay in the delivery of the rails need be apprehended.

"The contract for ties, which was sub-let by Messrs. Watts & Co. to a party which furnished them very tardily, has been transferred to others; and now it is expected that the supply hereafter will be fully adequate to the demand of the track-layers. The ties furnished are of excellent quality, and will compare favorably with any laid down in this part of the country.

"The chair thus far used is different from that in common use, and is known as 'Morley's chair.' It may be described as a divided cast iron chair, held together by two bolts of wrought iron. Your Board authorized its use as far as the Meramac, and if it should successfully endure the action of severe frost, it should be adopted for the whole line, as it would insure greater smoothness of track than is generally attainable by the chairs in common use.

"The spikes are furnished under an arrangement made by a former directory with Messrs. Chouteau, Harrison & Valle, and are of good quality.

"With the exception of two, the superstructure of all the bridges has been contracted for by Messrs. Boomer & Co., who, so far, have given satisfaction.

"There are two locomotives on the road in daily use, and one other in the shop in a forward state of completion. These machines were built by Mr. William Palm, of this city, and those now running have thus far given entire satisfaction. There is also upon the road two passenger cars, four house, eight flat and six gravel cars, all furnished from the workshops of St. Louis. This number will gradually have to be increased as the progress of the work is extended.

"The onerous conditions which were attached to the first grant by Congress for the right of way through the Government grounds at the Arsenal, Marine Hospital and Jefferson Barracks tracts, have at last been removed and a grant obtained, through the energy and vigilance of our present representative in Congress from this district, acceptable to the



company, and we hope to the public interest.

"The whole line is under contract, and the contractors, to whom your officers bear testimony for energy and skill, may be relied upon for executing what they have undertaken. The rails are now laid for twelve miles southwardly from St. Louis. By the first of December it is calculated the road will be finished to the Meramac river, and during the month of January the superstructure across that river, and the track down as far as Dunklin's, will be ready for the locomotive—a distance of twenty-five miles from St. Louis. On the next sixteen miles, to Fletcher's mill, the work is progressing towards completion, and, with the exception of two or three points, can be made ready for the rail by the time the track-layers reach them. Beyond this point is found the heaviest portion of the work, gradually lightening up as it approaches the St. Francis. Thence to the Pilot Knob, a distance of about ten miles, the road bed is ready for the rail."

The Engineer's estimates for the whole line are:

	Revised Estimate.	Estimate printed in 2d ann. report
Graduation & Masonry, \$1,983,530		\$2,107,128
Superstructure of Bldg'g 157,000		115,784
Track, 823,100		1,022,564
Fencing, Cattle Guards, &c. 33,500		38,500
Depots and Shops, 175,000		175,000
Rolling Stock, 300,000		300,000
Land Damages, 75,000		90,000
Engineering, Supt'd'n'ts office, Expenses &c., 175,000		145,000
Inst. on securities up to time of completion of work, 200,000		95,000
	<u>\$3,927,139</u>	<u>\$4,088,976</u>
Revised estimate less than original,		\$161,837
The road can be opened to do business of first year with less expenditure, as follows:		
Depots and Shops, \$100,000		
Rolling Stock, 100,000		
Fencing, cattle guards, &c. 23,500		223,500
		<u>\$385,537</u>

There is the item of discounts, however, for which no allowance is made, not properly belonging to an Engineer's estimate. This will be an important item, for the sacrifice of your State, City and County bonds has thus far been greater than the friends of the road had expected. Watt's & Co., were paid in those bonds at par value. Assuming all the resources of the Company in bonds, remaining after settlement with those gentlemen, to be sacrificed at the following rates, viz: State, 13 per cent.; City and County, 20 per cent.; Tax bonds, 10 per cent.; and we have about the following for discounts:

State Bonds, .....	\$291,000
City and County Bonds, .....	112,000
County Tax, .....	50,000
	<u>\$363,000</u>

The margin on the estimate of the Engineer will about evenly offset against the discounts.

The Treasurer's report of the road is:

Stock Subscriptions, .....	\$1,498,600 00
Grant of State Credit, .....	2,000,000 00
	<u>\$3,498,600 00</u>

#### REC'D PTS TO OCT. 21, 1856

Stock Subscription, .....	\$1,326,527 93
State Bonds, .....	1,044,000 00
Interest, .....	61,332 09
Bills Payable, outstanding, .....	103,215 00

Total, .....

PAID OUT TO OCT. 31, 1856.

For Engineering, .....	\$ 114,497 31
Contingencies and expenses, .....	29,126 16
Real estate, .....	34,296 47
Land damages and land agencies, .....	53,197 35
Interest on money—discount and commission on bonds sold, .....	260,899 99
Superstructure, .....	279,531 95
Depot stations, water supply shops, tools and machinery, .....	1,854 98
Contractors' vouchers, .....	1,461,831 11
Rolling stock, .....	29,411 89

\$2,264,757 21

#### ON HAND.

State bonds, .....	51,600 00
County St. Louis, .....	91,000 00
Bills receivable, .....	4,120 00
Carondelet bonds, .....	50,000 00
Iron Mountain Co., bonds, .....	25,000 00
Cash at Bank of Commerce, to meet interest on State bonds accrued, .....	21,720 40
Cash at E. D. Morgan & Co., .....	4,962 59
Cash in hand, .....	24,514 82

\$2,537,075 02

#### TEXAS CENTRAL R. R.—AUSTIN BRANCH.

The *Houston Telegraph* says:

We learn that the Directors of this road have authorized the opening of books on the Austin trunk for raising subscriptions to put the western line under contract. The last Legislature, it will be remembered, suspended the land bonus on the branch until the Red River line should be completed to the 32d parallel. The company, however, in order to meet the exigencies of the times, have wisely resolved to inaugurate measures for the immediate construction of this most important line of road, connecting the capital of the State and the vast agricultural interests of Western Texas directly with the cities of Houston and Galveston, and at a very early day with the lumber region of Eastern Texas, and, by means of the Opelousas Road, with the city of New Orleans. The land bonus will be realized within the next three years; and at once, if the Legislature will repeal the act of suspension. The stock subscriptions on the Red River line are already more than sufficient for completing that line beyond the Navasoto, while the most ample and satisfactory assurances are given by the people of Northern Texas that all the stock will be taken the present summer required for the construction of this road to the 32d parallel. Several heavy contractors stand ready to build the road on the basis of payment proposed by the company, and commence work at once along the entire line. The public are now fully assured of the most vigorous and energetic prosecution of the work, and its completion into the heart of the wheat region of Northern Texas within two years.

It is estimated that a million of dollars, in round numbers (exclusive of the bridge across the Brazos, the construction of which will be postponed until the road is completed and other resources created,) will prepare the road for the rails and equipments. Contractors who can furnish several hundred hands stand ready to take the work, and will take notes of solvent subscribers falling due within one, two and three years, for sixty-five per cent. of the contract, and the company's stock for the balance—say thirty-five per cent. To enable the company to contract the work, they require as follows: \$500,000 in stock notes, applicable to the Austin trunk, payable in three annual installments; \$150,000 in labor

subscriptions along the line, and \$350,000 in stock, making a total of \$1,000,000.

The following counties, besides many others, are deeply interested in the construction of the road, viz: Austin, Washington, Fayette, Burleson, Bastrop, Travis, Williamson, Caldwell, Hays, Comal and Burnet. The amount of money to be paid annually by eleven counties is \$167,000, or a little over an average of \$15,000 to each county. Is it necessary to say to the people of these counties that the construction of this road will save to the stockholders every dollar required to construct it in three years? Assuming that the cotton crop tributary to it will reach 40,000 bales in 1860 (and we believe it will reach 75,000 to 100,000) the value of the crop, at \$40 per bale, is \$1,600,000; so that ten per cent on the crop will more than save the capital required from the county interested in three years! When the planter estimates his losses on transportation and of interest while his crop is detained from market, the damages incident to the present transportation, the loss of weight, and the advantage of choosing a favorable period for selling, instead of the last market in the season, &c., &c., the diminished value of every other article sold on his farm, and the increased price of everything consumed, he will find the value of his crop reduced from 20 to 30 per cent. for the want of cheap and prompt transportation.

OVERLAND MAIL TO THE PACIFIC.—The following are the bids for carrying the overland mails: S. Howell and A. E. Pace, from Gaines county, on the Mississippi, to San Francisco, to commence at Vicksburgh, if preferred, weekly for \$1,000,000 for the first year, \$800,000 for the second year, \$700,000 for the third year and \$600,000 for the fourth year.

James T. Birch, from Memphis to San Francisco, semi-weekly, at \$600,000 per annum.

James Glover, from Memphis or Vicksburgh, semi-monthly, at \$300,000, weekly at \$400,000 and semi-weekly at \$600,000.

John Butterford, William B. Dinsmore, Wm. G. Fargo, James V. P. Gardner, Marcus L. Kenion, Hamilton Spence and Alexander Holland, from St. Louis, weekly at \$200,000 and semi-weekly at \$600,000. David D. Mitchell, Samuel B. Churchill, Robert Campbell, William Gilpin and others, semi-weekly, at \$600,000.

John Butterford, William B. Dinsmore, William G. Fargo and others, from Memphis, semi-monthly at \$300,000, weekly at \$450,000 and semi-weekly at \$595,000. John Butterfield and others, from St. Louis, semi-monthly at \$300,000, weekly at \$450,000, and semi-weekly at \$585,000.

James Johnston, Jr., and Joseph Clark, from St. Louis, semi-monthly at \$260,000, weekly at \$390,000 and semi-weekly at \$520,000.

William Hollingshead, President of the Minnesota, Nebraska & Pacific Railroad, put in a bid, but it was irregular, being after the time, proposing to perform the semi-weekly service for \$557,000. John Butterfield and others are willing to stipulate in their contract that the mail indicated by them may be modified and changed to the North or South, to avoid any obstacle that may be found, by experience, to interfere with the safe and regular transmission of the mails.



## Earnings.

**BALTIMORE & OHIO RAILROAD.**—The following is the monthly statement of this road for May as presented to the last regular meeting of the Board of Directors.

MAIN STEM.			
	Passengers.	Tonnage.	Total.
May, 1857	\$36,718.09	\$289,114.96	\$345,833.05
" 1856	62,178.45	373,571.25	435,749.70
Decrease May, '57	\$5,460.36	\$84,456.29	\$89,916.65
WASHINGTON BRANCH.			
	Passengers.	Tonnage.	Total.
May, 1857	\$26,712.12	\$11,450.67	\$38,162.79
" 1856	31,377.74	10,448.34	41,826.08
Decrease	\$4,665.62 Inc's	\$1,002.33 Dec's	\$3,663.29
NORTH-WESTERN VIRGINIA ROAD.			
	Passengers.	Tonnage.	Total.
May, 1857	\$2,868.14	\$2,443.95	\$5,312.09
REVENUE ON MAIN STEM AND WASH. BRANCH.			
	1856	1857	
Main Stem	\$435,749.70	Main Stem	\$345,833.05
Wash. B'ch.	41,826.08	Wash. B'ch	38,162.79
	\$477,575.78		
Total Revenue for May, '57			\$383,995.84
" " " '56			477,575.79

Decrease in May, '57 \$93,579.94

The financial year of the Company commenced with October. The receipts of the first eight months of the present year, compared with those of 1856, are as follows:

	1856.	1855.
October.....	\$471,391.12	\$420,807.49
November.....	424,754.94	398,190.36
December.....	466,103.77	438,102.56
1857.		1856.
January.....	301,773.29	188,830.78
February.....	355,398.97	199,383.73
March.....	549,262.48	404,976.85
April.....	404,948.39	550,326.24
May.....	363,995.84	477,575.88
	\$3,416,063.20	\$3,069,153.93
	3,069,153.93	

Increase present year \$347,479.87

Thus it will be seen that the increase for the first eight months of the fiscal year, as compared with the same period of last year, is \$347,479.87.

**PENNSYLVANIA RAILROAD.**—The following is a statement of the receipts of the Pennsylvania Railroad for the month of May:

Receipts for the month ending May 31.....\$401,177.57  
Same month last year.....453,586.25

Decrease.....52,408.68

Receipts from Jan. 1, 1857 to June 1, 1857,....\$2,151,819.49  
Same period last year.....2,181,295.61

Decrease.....\$29,476.12

**CHICAGO, ST. PAUL AND FOND DU LAC RAILROAD.**—The earnings of this road for May were:

May, 1857.....\$15,168.32  
May, 1856.....19,513.01

Increase.....\$30,655.31

**CLEVELAND & TOLEDO RAILROAD.**—The earnings of this road for May were:

May, 1857.....\$88,894  
" 1856.....90,757  
" 1855.....76,361

**CATAWISSA, WILLIAMSPORT & ELMIRA R. R.**—The earnings of the Catawissa, Williamsport and Erie Railroad, during the month of May were.....\$39,679.60  
Due connecting roads.....7,932.95

Net receipts for May, 1857.....\$31,746.65  
do do 1856.....22,667.31

Increase 40 per cent.....\$8,679.34

**MILWAUKEE & MISSISSIPPI R. R.**—The earnings of the Milwaukee & Mississippi R. R. for May were

May, 1857.....\$80,703  
" 1856.....61,367

**LACROSSE & MILWAUKEE R. R.**—The earnings of this road for May of the present year as compared with the same month last year were

May, 1857.....95 miles.....\$68,821.77  
" 1856.....61 ".....41,476.00

Increase 34 ".....\$26,745.77

**RAILROADS IN CANADA.**—Among the bills which have passed the Canada Parliament during the present session, and which received the assent of His Excellency the Governor General on the 27th of May, were the following relating to the railroads and kindred enterprises in that Province:—

An Act to define the powers and confirm certain proceedings of the Champlain and St. Lawrence, and Montreal and New York Railroad Companies.

An Act to encourage Mining Companies by empowering them to construct gravel or macadamised roads or tramways to connect with railways, highways and navigable waters.

An Act to amend the Act incorporating the Montreal Telegraph Company, and to extend the powers of the said Company, and to authorize the establishment of a transatlantic line of telegraph by the said Company.

An Act to dispense with Government Directors in the Grand Trunk Railway Company of Canada, and to facilitate the completion of the Company's works from Riviere du Loup to Sarنيا.

An Act for the better prevention of accidents on railways.

An Act to amend the Act to provide for the formation of Incorporated Joint Stock Companies for manufacturing, mining, mechanical, or chemical purposes, so as to render foreign stockholders eligible as trustees.

An Act to increase the Capital Stock of the Port Delhouse and Thorold Railway Company, and to change the name of the Company.

An Act for the establishment of a Weekly Postal Communication by steamers between this Province and the United Kingdom.

**\$100,000 RAILROAD SUBSCRIPTION.**—The proposition to subscribe \$100,000 to the Capital Stock of the Hannibal and Naples R. R. which was submitted to the voters of the former place a few days since was almost unanimously adopted. The Hannibal 'Messenger' says:

We never have seen more unanimity of sentiment and feeling manifested by any body of people on any subject than was exhibited on last Thursday by our citizens, on the proposition to vote \$100,000 stock in the Hannibal and Naples Railroad. All seemed alive to the importance of pushing ahead the great work. There were 222 votes cast for and only eight against the subscription. Most of those votes against it, were decidedly in favor of giving aid to the road, but had their own peculiar plans and notions as to how it should be done.

**PENSACOLA RAILROAD.**—We find in the Pensacola Gazette the report of Major W. H. Chase, President of the Alabama and Florida Railroad. The report gives an encouraging statement of the progress and prospects of the road. We give a synopsis of it from the Democrat:

"Twenty-four miles of the road have been graded, and the contractors are now finishing up that portion of the lines upon which the heaviest work, both of masonry and excavation and embankment, are to be found. From the past progress of the work, it is anticipated that the grading to the Alabama line will be completed by the first of July, 1858, and, says the report 'probably will be. Calculating that the last load of iron rails may be delivered at the Company's wharf, in the city, by the 1st of September next, the entire track laying may be completed at the same time the last shovels full of earth have been thrown up.'

"Negotiations are now in progress for procuring the iron which will be consumed as

soon as the Company gets legal possession of the public lands donated by Congress.

"The report anticipates that as soon as the road is completed to the State line, it will bring down 10,000 bales of cotton, 25,000,000 feet of timber, and various other articles, passengers, &c., besides carrying up supplies.

"A very gratifying estimate is exhibited, showing that the financial obligations of the Company incurred for the first year's operations of the road, however, into Conecuh County, of which we have satisfactory assurance, will add greatly to the revenues of the road, and afford ample means for the increase of the rolling machinery, the construction of depot buildings and the consolidation of the road.

## SUEZ SHIP CANAL.

There is considerable attention being drawn to this project at the present time throughout Europe by M. F. de Lesseps who is acting as agent for the company. Relative to this project the Dublin *Freeman's Journal* says:

"The Suez canal question is the question whether or not our trading ships and immigrants, our importers and our exporters, shall enjoy the facilities, as to time and ease of transit, now reserved for the dispatches, boxes of specie, and aristocratic traveler, that go by the overland routes. It is not a question of shortening the dispatch journey to India by four or five days (though even that might be done), but to open the dispatch route to trade and immigration generally. All that is wanted for opening that route is to cut through the Isthmus of Suez. The best engineers see no difficulty in the operation. Men of substance and money see their way to the returns, and are ready with the funds. Manufacturers, merchants, and shipowners admire the project and desire its execution. From a commercial point of view, the advantages of the proposed ship-route are so great that their very enumeration is sufficient to silence the most prejudiced antagonists of new schemes and new routes. The new route would shorten by 5,000 miles the ship-route to India, and make that ship-route practical for steamers. It would, therefore, increase by a million or two of tons the present consumption of coal—an inestimable advantage to coal mining districts. A shorter ship-route to India and Australia would also lower freights and save large sums in insurance and agencies; it would enable us to send out larger quantities of manufactured goods and machinery, and it would enable India to compete in the English markets with America in its raw cotton and breadstuffs. Lower rates of passage would stimulate emigration, and give our Eastern dependencies a large supply of those ready hands which they want for the development of their natural resources—while here the said hands, for want of remunerative employment, are too frequently driven to crimes, and while at best they are a charge upon the more prosperous portion of the population. The project, whose special character is the universality of the advantages it promises, is, therefore, one of high importance, and should receive the serious consideration of every commercial community."

In his remarks before the the board of trade of Dublin M. de Lesseps said

"He would not enter into all the details of the plan, which had now been in agitation for a period of eighteen months; there was however, one feature in which the project differed from every other. In other cases the works



were carried out by the shareholders at their own expense but in the present the Viceroy of Egypt had paid down 1,200,000*l.* out of his own purse before bringing the project before the world at large. All doubt and difficulties had been removed by the report of the engineers to which he had referred; and though details were foreign to the object of their visit, the council might nevertheless not think it uninteresting if he were to give a few explanations as to the canal itself. The track of the canal was from Suez to a spot in the Pelusian Gulf, a distance of 72 miles, and the canal would run into two lakes, Timsah and the Bitter lakes, which latter, in fact, was dry or very nearly dry at the present moment. It was intended to convert lake Timsah into a harbour fit for coaling and repairing vessels, and for a careening dock. For 12½ miles from Suez to lake Timsah the canal will be 339 feet wide, sloping downwards, so that the bottom will be only 70 feet wide; the rest of the canal will be 263 feet wide, but uniformly so. The difference was, because if anything, the current was rather greater from the Red Sea until it reached lake Timsah, where it was neutralized by the large body of water into which it would run; but to prevent the effect which these currents would have, it was proposed by the engineers that this slope should be made in that portion of the canal. A very important feature connected with this project was, that the Viceroy had granted to the company a tract of land 60 miles in extent, which runs from Cairo to lake Timsah; this land would be useless unless a branch canal were formed to irrigate those lands; but the Viceroy had already anticipated the advantages to be derived from it, and had projected at his own expense this canal at the cost of 9,000,000 francs, or 360,000*l.* Upon both sides the land would belong to this company as far as it could be irrigated, and it had been ascertained that no less than 155,000 acres of land could be irrigated by this means in the winter, and 93,000 in the summer. In addition to the land at either side of the branch canal he also granted, for thirty miles along both sides of their elementary canal, as much land as could be possibly irrigated, and, moreover, 30 miles in this direction (pointing to the map). The soil in this portion of the Isthmus, was extremely fertile, as much so as some of the richest lands in Holland; portions were of course of an arid nature, but when irrigated were capable of becoming as fertile as the rest. The whole extent of the land given to the company, not merely upon lease but by a grant in perpetuity, was 250,000 acres, which were capable of growing indigo, cotton, and Indian corn, and might, in time, be very valuable to the company. Another very important point was, that no difference existed in the level of the two seas.

The reason the canal was not made before was, because the ancients always supposed there was a great difference between the two seas, and that by cutting open the Isthmus they would give rise to an overflow attended by very dangerous consequences; it had now, however, been ascertained beyond all doubt that there is no difference at all between the level of the two seas, nor are there any obstacles to be encountered. The only two hillocks are of sand and gravel—one at El Guisr, which is fifty feet high, but forming, of course, no obstacle at all, and the other a smaller one, forty eight feet in height; but both are of firm sand, grown outside with shrubs, and quite compact. There was a supposition very

generally entertained, that these sands were moveable, and consequently, that when the winds blew high the canal would become choked and impossible to be kept open. This was, however, proved to be quite a chimera, and they had the testimony of his Excellency, who, from having spent a great portion of his time in Egypt, was competent to form an opinion to that effect. The sides of the canal were covered upon one side with gravel, and upon the other with shrubs, which grew so thickly that the camels had great difficulty in passing through them. The soil was composed of layers of sand, plastic clay, and sand again which formed a very good substance through which to cut a canal, whilst it was of sufficient solidity to prevent the currents from destroying the banks. There would be no locks, so that a vessel could sail right through from the Mediterranean to India, or to any other part of the East. There would be a coaling station at Lake Timsah, which would be also used for provisioning and victualling purposes; and the objects of the sweet water canal from Cairo to Timsah would be therefore—first, to enable the labors at the works to be carried on; it would be necessary also for irrigating the land; and secondly, it would create a great traffic with Cairo itself, which was the capital of Egypt, possessing a population of 300,000.

#### THE AREA AND RESOURCES OF RUSSIA.

The report on the commercial relations of the United States with foreign powers furnishes interesting information in regard to the extent and resources of the vast empire of Russia. It covers an area of 7,283,553 square miles, of which about two millions are in Europe and the remainder in Asia and America. It has a population of over sixty-nine millions. The products of the country of course are varied, extending as it does over so many degrees of latitude and longitude, with their differences of climate. Cereals of every kind are raised in great abundance, but rye, being the common food of the peasantry, is produced in much greater quantities than any other sort of grain. The annual product of grain in European Russia, including Poland, is estimated at 1,495,000,000 bushels, valued at \$720,416,665. Flax and hemp are extensively cultivated, and form a leading export. Tobacco is grown in the Southern provinces, and latterly much attention has been given to beet root. In 1848 the quantity of beet root sugar manufactured was estimated at 32,240,000 pounds. Tallow and wool are also important articles in Russian export trade—the annual exports of the latter amounting to about 18,000,000 pounds. The climate of the country, however, is not adapted to the production of fine wool. Manufactures are not yet much advanced in Russia, although her leather, especially that used for book-binding, surpasses that manufactured by any other nation; all attempts to imitate it have failed. The manufacture of glass has also reached a state of great perfection. Her other manufactures are of coarse articles, such as sail cloth, cordage, potashes, soaps, &c. The manufacture of cotton has increased rapidly. In 1832 the quantity of raw cotton imported was 4,176,000 lbs.; in 1852, 62,928,000 lbs., of which about one-sixth was received from the United States. The manufactures of Russia give employment to upwards of six millions of persons, of whom four-and-a-half millions are engaged in the manufacture of flax and hemp. The total annual value of all the manufactures is estimated at \$364,500,000. Moscow is the center of this branch of

industry, and is inhabited almost exclusively by manufacturers and artisans. None but native Russians are allowed to engage in the internal trade of the country; and, therefore, a foreigner who imports goods into the country must sell them to Russians only. The foreign trade is mostly carried on by foreigners, of whom the English are the principal. Every Russian carrying on trade must be a burgher, have his name registered in the burghers' books, and possess a certain amount of capital. Foreign merchants pay a license of \$900 to \$950 per annum. The number of native merchants engaged in commerce in 1846 was 40,184, whose declared capital amounted to \$86,640,300; while the number of foreign merchants were but 34, employing a capital of \$382,000. Our exports to Russia are of little account, except cotton, of which article we sent, in 1853, \$2,254,345 worth. The value of all other articles was about \$150,000. The foreign commerce of Russia in 1852 was as follows: Total exports, \$85,855,372; imports, \$84,648,039; balance in favor of Russia, \$1,207,333. During the late war the exports fell about \$36,000,000 below the above figures, and the imports about \$32,000,000. The public debt of Russia in 1853 was \$591,429,834, including \$271,500,000 of paper money in circulation, of which \$38,250,000 bears interest.—*Pennsylvanian*.

[From the American Railway Times.]

#### HUDSON'S BAY TERRITORY.

Our Canadian neighbors appear to be following up with great zeal the enterprise we noticed some time since, of annexing to Canada the vast central region now monopolized by the Hudson's Bay Company of fur traders; an enterprise which, if successful, as we before remarked, must soon lead to a Northern Pacific Railway. The capabilities of the region west of Lake Superior and north of the United States boundary for sustaining a civilized population have been wonderfully overlooked. A great part of the valley of the Saskatchewan compares with the State of New York for mean temperature, and has both winter and summer and soil far better adapted to the growth of wheat. The country is supplied with abundance of timber, water-power, prairies and mineral coal, and Lake Winnipeg, an inland sea 300 miles long, is the center of a network of navigable waters almost equal to that which drains the valley of the Mississippi. These stupendous facts rest on most unquestionable authority, leaving us to wonder how a little close corporation of London fur traders should have kept possession for half a century after the invention of the steamboat of a territory sufficient for an empire larger than France. This is sufficient to account for the enthusiasm manifested by the *Toronto Globe* in pushing the overthrow of the little dog-in-the-manger fur corporation, and annexing the Saskatchewan to Canada, or rather Canada to that. The last issue of the paper above named contains thirteen columns of matter on this subject, with a map specially prepared to illustrate it. The whole cannot fail to produce a very deep impression in Great Britain, and might excite some Yankee jealousy if we had not still about as much wild land as we can devour. We make a few extracts from the *Globe*, to give our readers an idea of the pith and moment of it, so far as regards the value of the territory. In regard to the soil, an American citizen of Minnesota, writing upon the superior agricultural capabilities of the Red River country, says of the



wheat grown there, that it is superior to any grown upon the continent: "The best Illinois wheat weighs from 60 to 65 lbs. to the measured bushel; the best Genesee 60 to 65; Red River 65 to 70 lbs. to the measured bushel." Col. Long, who visited the Red River in 1821-2 says, "Agriculture is attended with success; wheat, barley, millet, pulse, potatoes, and other esculent roots are cultivated."

A Red River correspondent of the *Globe* writes:

"Here we have wood to build with and fertile plains inviting the husbandman to put in his plough, without the preliminary delay, toil and expense of clearing before the settler can force it to give him bread. These plains, when ploughed up for the first time, are allowed one summer's rest, that the turf may rot. The ensuing spring it is ploughed a little deeper than when first ploughed; then sown with wheat, at the rate of 2 bushels or  $2\frac{1}{4}$  to the acre, which yields, in an ordinary season, sixty bushels per acre, and each bushel will weigh from 64 to 70 lbs. Land, in general, is too rich for barley, unless cropped for several successive years with wheat, or in dry seasons. The barley is generally of good quality, and weighs from 48 to 55 lbs. per bushel."

Captain Kennedy, who is now operating among the Red River settlers, to secure their co-operation in the annexation movement, writes to the *Globe*:

"A person of the name of Slater has raised from nine bushels of seed, on ten acres of land, 600 bushels, averaging from 60 to 65 lbs. to the bushel. The land from which this was obtained was for the first time ploughed in summer, then left fallow till the following spring, when it was again ploughed, and thereafter received its thin scattered seed, which gave this wonderful return."

"Captain Pope, of the United States Army, in the course of an exploration for his government, visited the Red River country in 1849. He traversed the country from north to south, a distance of five hundred miles, and says that with the exception of a few swamps, he saw not one acre of unproductive land. The soil is a black mould several feet in thickness, with proportions of sand sufficient to give the necessary warmth. He represents the valley as presenting in its whole extent an almost unbroken level of rich prairie, intersected by heavily timbered tributaries of the river; the main river itself being also heavily timbered on both banks with oak, elm, ash, maple, &c. The valley, he says, is amongst the finest wheat countries in the world. If further proof of the existence of a vast and fertile region from one to five hundred miles west of Lake Superior were needed it could be furnished; but the above will certainly be regarded as satisfactory."

"Mr. Thomas Simpson, in his narrative of discoveries in 1836 and '37, writing of the country about Lake Manitoba, situate above one hundred miles to the north of the Red River, says that the soil and climate of the place equals Red River. Barley, wheat and potatoes yield in the most seasons excellent returns. The Lake produces very fine white fish on some of its tributary streams; tolerable salt is obtained from the saline springs, and the wild hop grows in many places in great profusion and of good quality. It is, however, in the great valley of the Saskatchewan that the most valuable country is to be found. The French originally, and afterwards the North-West Company, established trading posts along the entire valley of both

branches; and in more recent years the Hudson's Bay Company have occupied these posts."

Franchère, a practical business man, thus writes of the valley:

"The river Saskatchewan flows over a bed composed of sand and marl, which contribute not a little to diminish the purity and transparency of its waters, which, like those of the Missouri are turbid. Except for that it is one of the prettiest rivers in the world; the banks are perfectly charming, and offer in many places scenes the fairest and most smiling, and the most diversified that can be seen or imagined; hills in various forms, covered with superb groves; valleys agreeably embrowned at evening and morning by the prolonged shadow of the hills or the woods which adorn them; herds of the light-limbed antelope and the heavy, colossal buffalo—the former bounding along the slopes of the hills, the latter tramping under their heavy feet the verdure of the plains. All these champaign beauties, reflected and doubled, as it were, by the waters of the river, whilst the melodious and varied songs of a thousand birds, perched on tree tops, the refreshing zephyrs, the serenity of the sky, the purity and salubrity of the air, all, in a word, pour contentment and joy on the soul of the enchanted spectator. How comes it to pass, said I to myself, that so beautiful a country is not inhabited by human creatures? The songs, the hymns, the prayers of the laborer and the artisan, shall they never be heard on these plains? Wherefore, while in Europe so many thousands of men do not possess as their own an inch of ground, and cultivate the soil of their country for their proprietors, who scarcely leave them wherewith to support existence—wherefore do so many millions of acres of apparently fat and fertile land remain uncultivated and entirely useless? Or, at least, why do they only support these immense herds of wild animals?"

"Sir John Richardson says of this valley, that wheat succeeds admirably, and that even at Cumberland house (see map), in latitude 53°, Indian corn is cultivated, and that the summer heat exceeds that of Paris or Brussels. Immense herds of buffaloes and droves of horses pass the winter on the plains in good condition, living upon the grass, which proves that the snows are not deep, nor the climate rigorous. Sir George Simpson says that he has seen ten thousand carcasses of the buffalo lying putrid in one valley of a stream emptying into the Saskatchewan, and infecting the air for miles around; these had been drowned in crossing the stream. Our readers have no doubt often heard the almost incredible tales of the thousands of buffaloes that roam in droves over these plains. If, in their present uncultivated state, they afford sustenance for these animals, what would these wilds do when cultivated by the hand of man?"

"Westward of this great valley extend the boundless plains of the Arthabasca, through which flows the river of that name, and its tributaries, which afterwards, for hundreds of miles, discharges itself into the Great Slave Lake. The plains of Athabasca is a country spoken of by writers in a similar strain to that in which the valley of the Saskatchewan has been noticed. Sir Alexander Mackenzie writes in raptures of this section of country, as ardent as those in which Franchère indulges relative to the Saskatchewan. Sir John Richardson says that from Methey portage westward the country, though deeply furrowed by river courses and ravines, and more

or less thickly wooded, partakes so much of a prairie character, that horsemen travel over it to Lesser Slave Lake and the Saskatchewan, a distance of about 300 miles.

"The agricultural value of the Athabasca valley is much increased by its closer approach to the westward, where the climate becomes more modified, because more subjected to the influence of the warm winds blowing from the Pacific.

"Northward and westward of the valley of the Arthabasca we enter that of the McKenzie, a noble river, which Sir John Richardson tells us is navigable for large steamers for a distance of thirteen hundred miles; and it flows through a country, although perhaps not so rich and fertile as the countries of the Saskatchewan and the Arthabasca, still it is favorable to agriculture, notwithstanding that it is situated so many hundred miles to the northward.

"Sir Alexander Mackenzie, who resided eight years on the Peace river, a tributary which empties into the Mackenzie river, writing respecting the locality 56°9 north, says that the birds, which were like robins, remained there and sang during the whole winter; and that there was but little snow; and that it had entirely disappeared on the 5th of April; and that the river was quite clear of ice on the 25th of April; and he attributes the mildness of the climate to the influence of the warm winds from the Pacific.

"Dr. King, writing in reference to the same country says (22d June): 'the earth was teeming with the fragrant offspring of the season, and it required no great stretch of the imagination to fancy one's self surrounded by the charms of an English garden, or amid the mild beauties of a southern climate. Wheat has been grown as far north as Fort Laird, which is in latitude 60°5 north.'

"Sir John Richardson, writing of this locality, says, 'barley and oats yield good crops, and in favorable seasons wheat ripens well; potatoes yield abundantly.'

"And again, writing from Fort Stimpson, in latitude 62° north, situated upon another tributary of the Mackenzie, he says, 'barley is usually sown from the 20th to the 25th of May, and is expected to ripen on the 20th of August, after an interval of 92 days; in some seasons it has ripened on the 15th. Oats, which take a longer time, do not thrive so well, and wheat does not come to maturity. Potatoes grow well, and no disease has affected them, though the early frosts sometimes hurt the crops.'

"Mr. McLean, writing of the same locality, says: 'I was very agreeably surprised to find that the high latitude of this locality did not prevent agricultural operations being carried on with success. Although the season had been rather unfavorable, the farm yielded 400 bushels of potatoes and upwards of 100 bushels of barley. The barn-yard, with its stacks of barley and hay, and the number of horned cattle around it, had quite the air of a farm in the old country.'

"From the American boundary on the south to Lake Athabasca on the north—a distance of nearly five hundred miles—and from Lac la Pluie on the east to the Rocky Mountains—about a thousand miles—we think we have sufficient evidence to show that there exists a country not only 'fit for habitation,' but actually possessing natural resources equal, if not superior, to any portion of North America."

About all this there is doubtless some *colleur de rose*.



## RAILROAD RECORD.

TABLE OF RAILROAD STOCK, CAPITAL, INTEREST. BOND, &amp;c.

Amount of Loan.	Rate of Int. rat.	When Payable.	Where Payable	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	173	Al x'ndria, Lon & Hmp'r		173	6,000,000.00				
493,800	0			1862-3	2d	54.55	Androscog'n & Kennebec		54.55	1,400,000.00		209,475.46	170,246.98	none.
199,000	7	July & Jan.			Domestic.		Atlanta and LaGrange...		86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646	0			now	"		B'az'r, Old T. & Milford...		12.5	133,000.00	52,646.26	29,104.40	2,671.61	15,000 in '53
500,000	7		N. Y.	1866	1st mortgage.	44 6-8	Boston & Worcester...		44 6-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m
500,000	7			1857-9-62	Income.		Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000	7			1864	Domestic.		"							
200,000	7			1872	4th mortgage.	30.	Central Ohio...							
577,187	6			1874	2d	43	Champl'n & St. Lawrence		43	1,872,800.00	1,001,087.00	163,200.00	77,700.00	10 per ct.
192,200	7				Domestic.		Ch'r'l'te & South Carolina...		110	1,750,000.00	320,000.00	291,219.86	47 per ct.	\$72,300
380,000	7		N. Y.	1864-7	1st mortgage.	123	Ch'go, Burl'ng'n & Quincy...		123	3,746,900.00	3,114,000.00	1,093,185.00	571,725.23	15 pr. ct. 6m
1,140,000	6-7-8			1868-9	2d		"							
1,300,000	8			1863-76	Convertible.		"							
374,000					1st mortgage.		Chicago, Fulton & Iowa...		5.					
1,300,000					2d	13	Cin. Wil'ng'n & Zanes'ville		25.	1,761,149.16	2,241,500.00	221,491.96		
532,000					3d		"							
104,000					Income.		"							
305,500	6			1873	Convertible.	103 1/2	Cleveland Col. & Cin.		139	4,741,920.00		1 3,754	700,804	6 per cent.
540,000	7			1864	1st mortgage.	85	Cleveland & Mahoning...		85	1,500,000.00				
43,000							Cumberland Valley...		52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
400,000	7			1857-8-9	1st mortgage.	52	Dayton & Cin. short line...		52	1,000,000.00	1,000,000.00			
0,000 0	6				1st	93 6-10	Eastern Railroad...		130	3,345,000.00		665,578.79	282,077.24	\$234,133
500,000	7			1869	2d	20	East Ten. & Virginia...		130	625,450.00		30,897.30	19,692.30	
350,000	10			1861	1st mortgage.	109	Essex Railroad...		20	700,000.00				
740,000	10			1864	2d		Evansville & Crawd'v'le		109	2,220,657.30		243,970.42	136,061.90	\$133,231.45
82,000					1st mortgage.		The Fitchburg (Mass.) R.R.			3,540,000.00		681,102.52	243,837.81	3 per cent.
400,000							Fox River Valley...		33	800,000.00				
200,000							Fair Haven Branch...		15	300,000.00		50,381.33	14,822.45	\$166,240.00
100,000	0				1st mortgage.	233	Georgia R.R. & Banking Co.		233	4,156,000.00		1,066,202.57	357,689.42	\$66,240.00
100,000	6			1858	1st	20	G't Falls & Conway R.R.		20	4,191,550.00		2,066,836.00	176,329.98	8 pr. ct.
300,000	6 1-9			1869-70	1st	74	Housatonic Railroad...		74	2,000,000.00				
4,000,000	7			1860	2d	20 1/2	Hudson River...		144	4,000,000.00		1,924,382.44	718,037.40	
2,000,000	7			1875	3d mortgage.	56	"		144	4,000,000.00				
1,812,000	7			1875	1st	97	Illinois Central R. R.		136	18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.
13,885,000	6 1/2			1860	Freeland.	94	Indiana Central...		704	3,558,376.00				3 pr. ct.
4,115,000	7			1862	1st mortgage.	80	Iron R. R.		13	123,700.00				
3,000,000	7				2d		Kentucky Cen. 2d Div.			719,500.00				
600,000	7				1st mortgage.		Knoxville & Kentucky...		32	166,000.00		23,233.59	14,233.59	
700,000	7						Laurens (S. C.) R. R.		184					
50,000	7						Louisville & Nashville...		12 3/5	300,000.00		50,274.71	14,149.13	\$5,000
700,000	7						Lowell & Lawrence...		32	2,697,090.00		587,236.57	162,277.50	10 pr. ct.
700,000	7						Mad River & Lake Erie...		26	2,697,090.00				\$24,000
700,000	7						Manchester & Lawrence...		19 1/2	1,000,000.00				
218,000	7				1st		Marletta & Cincinnati...							
1,000,000	7			1866	2d		Mexican Gulf R. R.		27					
1,000,000	7			1875	2d		Milwaukee & Horicon...		30					
2,000,000	6				1st		Mineral Point R. R.		32					
2,500,000	7			1868	1st		Mohile & Ohio...		32					
2,000,000	7			1874	2d		Nashua & Lowell R. R.		497	10,000,000.00		253,498.96	162,802.24	
60,000	7 and 8			1867	1st mortgage.		Nashua & Lowell R. R.		13	600,000.00		191,752.42	55,501.74	7 pr. ct.
420,000	8						New Haven & North'm'n		55	922,500.00				2 pr. ct. 6m
329,000	8			1881	1st		New York Central...		83 1/2	23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
320,000	8			1884	2d		N. Y. & Harlem R. R.		11 1/2			1,040,393.26	64,678.71	\$37,692.30
6,000,000	6						" Pref.		45				51,544.40	
500,000	7			1869	1st mortgage.		N. Y., Prov. & Boston...		50	1,58,000.00		245,713.00		
2,356,000	6			1864	2d		N. Lon., William'tu & Pal.		66	1,700,000.00		120,571.50		\$25,000
8,892,600	6			1873	1st		Pontchartrain R. R.		5	500,000.00				
3,000,000	7			1873	2d		N. O., Opel'o's & Gr L. West.		62 1/2	6,000,000.00		116,795.00	366,118.80	7 pr. ct.
336,000	7			1873	3d		N. Y. & New Haven...		103 1/2	3,000,000.00		1,007,665.48		
411,700	7			1859	1st mortgage.		North Western Va. R. R.							
500,000	6						"							
300,000	6						"							
1,500,000	6			1873	1st mortgage.		Northern (N. Y.) R. R.		118	2,000,000.00		600,000.00		7 pr. ct.
1,000,000	6			1873	2d		North Missouri R. R.		19 2			25,176.74	88,453.56	2 1/2 pr. ct.
2,000,000	6			1873	3d		Norwich & Worcester R.R.		60	2,111,500.00		304,236.33		
1,500,000	7			1877	1st mortgage.		Ogd'n'sb'g. Clay't'n & Rome		94			289,690.10	137,875.93	5 pr. ct.
3,000,000	5			1860	1st mortgage.		Ontario, Simcoe & Huron		88 3	2,937,500.00		276,539.02		
419,300	6						Orange & Alexandria R.R.							
221,800	6						Peoria & Bureau Val. R. R.		47	1,500,000.00				6 pr. ct.
400,000	6			1861	1st mortgage.		Philadelphia & Trenton...		28 1/5	1,000,000.00				
1,200,000	7			1864 to 1874	1st		Portsmouth & Concord...		47					
300,000	6						Potsdam & Watertown...		76	2,000,000.00				
300,000	8			20 years.	1st mortgage.		Rutland & Washington...		62 1/2	950,000.00		68,525.42		
350,000	7						St. Louis & Iron Moun. R.R.		86	6,000,000.00				
800,000	6						Salem & St. Louis R. R.		168 1/2	400,000.00				
1,260,000	6						Snd'sky, Mans'p'd & New'k		116			75,246.06	19,050.64	
500,000	6						Sullivan Railroad...		26	500,000.00				
250,000	6						Tennessee & Alabama...		145			39,586.44		11m. 12 pr. ct.
317,000							Terre Haute & Richmond		73	1,294,450.00				
300,000				1861	1st mortgage.		Toledo, Wabash & Western		242	1,000,000.00				
198,000				1840	2d		Troy & Boston...							
262,500				1875	3d		"							
2,500,000							Vicksburg & Jackson...		46				165,076.04	
500,000	7				1st, 2d, 3d		Virginia & Tennessee...		215	3,000,000.00		322,048.60		2 pr. ct.
200,000	7				1st mortgage.		Westchester (Pa.) R. R.		31	165,000.00				
					2d		Wilmington & Manchester		171					
							Winchester & Potomac...		32					
							Worcester & Nashua...		45 6/9					



AMERICAN STOCKS AND BONDS.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858. ....	"	"
Cin. Ham & Dayton, 2d mort., ....	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865. ....		
Erie, 3d Mortgage, 1883, ....	64	66
" Sinking Fund, ....	82	84
" conv. 1862. ....	81	83
Grand Trunk (Canada) Debenture, ....	73	75
Great Western " conv., ....	90	91
" " non-conv., ....	116	121
Illinois Central, 1st Mort., 7's, ....	105	107
" " with option 70 per cent. shares till Jan, 1858. ....	00	91
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ....	106	108
Little Miami 1st Mort. not conv. 6's. ....	86	88
Marquette and Cincinnati, 1st Mort., ....	"	"
Michigan Central, conv., 8's, 1860. ....	90 ½	91 ½
do do do 1869. ....	90	91
N.Y. & N. Cent. No Mort. Not conv., 6's 7d. ....	78	80
" " conv., 7's. ....	92	94
Ohio and Mississippi, 1st Mort., ....	"	"
Ohio and Pennsylvania, Income 1872. ....	68	70
Pansma. No mort. conv. 1866. ....	"	"
Pennsylvania, 1st Mort., conv., ....	88	89
" Sterling, 2d Mort., ....	91	93
Seabenville and Ind., 2d Mort., ....	"	"

The quotations given are sterling quotations. The American values is to be obtained by adding or exchange generally about 10 per cent

AT THE STOCK BOARD,  
MERCHANTS' EXCHANGE  
AND AT PRIVATE SALE.  
BY HEWSON & HOLMES.

Little Miami R. R. Co. 6 per cent. 1st mort- gage Bonds.....	50
Cincinnati, Hamilton & Dayton R. R. Co. 7 per cent. 1st mortgage Bonds.....	58
Do., do., 2d do do.....	83
Covington & Lexington 6 per cent. 1st mortgage Bonds.....	67
Do., do., do., 2d mor.....	66
Indianapolis & Cin., 7 per cent. 2d mort- gage Bonds.....	80
Marietta & Cincinnati 7 per cent. Domies- tic Bonds.....	40
Hillsborough & Cincinnati 7 per cent. 1st mortgage Bonds.....	55
Ohio & Mississippi 7 per cent. 2d mort- gage Bonds.....	60

Little Miami R. R. Co. stock.....	90@91
Cincinnati, Ham & Dayton.....	68@69
Covington & Lexington.....	18@19
Indianapolis & Cincinnati.....	40
Marquette & Cincinnati.....	60
Ohio & Mississippi.....	12½@13
Columbus & Xenia.....	90
Indiana Central.....	90
Junction (Indiana).....	8
Cincinnati & Chicago.....	27
Southern Pacific.....	\$5 paid, \$3 C1 to 3 C25
do do.....	3 do 175 to 200

The past has been a quiet week in general business, and characterized by an improvement in the tone of the money market. This is probably due to the diminution in the demand, and to the improving prospects of the crops. Vegetation is luxuriant, and there is a decided probability of more than average production this year. The river is high, and there is every advantage for navigation that could be desired. With such a stage of water coal should be cheap again.

The specie export of New York last week was very heavy, and it is an unfavorable symptom. The receipts, however, are large, and the bank balances well sustained. Stocks are lower in New York, and the bears are having it all their own way.

The most noticeable feature of the week has been the discovery of a large deficit in the State Treasury of Ohio. It appears that when the late incumbent, W. H. Gibson, came into office, he discovered a large deficit, amounting to about half a million dollars, in the accounts of his predecessor, Mr. Breslin. Mr. Gibson was in-

Decrease..... 1,195.52

Since the issue of our last circular an increasing dulness has pervaded all departments of trade, and in none have the transactions shown a greater decrease, in quantity, than in Bonds and Stocks; notwithstanding which prices have been very fully maintained, and in one or two instances, a slight advance established. Ohio and Mississippi shares are very firm with an advance of  $\frac{1}{4}$  to  $\frac{1}{2}$ ; very little of this stock is on the market, holders, generally anticipating better prices within a short time. The Little Miami R. R. Co., have declared a cash dividend of 5 per cent. payable here to day, or in New York funds on the 1st of July, and have a surplus from the past six months earnings of \$29,000 These results have imparted a much firmer feeling to holders of the stock, and it is generally held at 91 and upward. Eastern exchange has declined and we quote  $\frac{1}{2}$  to  $\frac{3}{4}$  as current rates.

\$5,000	Virginia G's.....	92
6,000	Missouri State G's.....	83½
3,000	Tenn. State G's, '90.....	87½
1,000	N. Y. Central 7's.....	99
6,000	Erie R. C. Bonds, '71.....	73
2,000	N. Y. Central 6's.....	84
1,000	Hudson Riv. R. R. 3d Mortgage Bonds.....	56
1,000	Hudson River Con. Bonds.....	57
5,000	Illinois Central R. R. Bonds.....	97½
6,000	Galena & Chicago 2d mt. Bonds.....	76
1450	shaies New York Central.....	83
75	" Chicago & Rock Island.....	94½
500	" Erie.....	33
100	" Hudson River.....	20½
100	" Harlem R. R. stock.....	11½
140	" do do do pref.....	25
1950	" Reading.....	75
350	" Mich. Cent.....	91½
50	" Mich. S. & N. Ind.....	45
5	" do do p. stock.....	50½
150	" Mich. S. & N. Ind. scrip.....	80
100	" Panama.....	92
150	" Illinois Central.....	136
5	" Galena & Chicago.....	89½
25	" Milwaukee & Miss.....	61
20	" C., B. & Quincy.....	90
50	" Cleveland & Pittsburg.....	42½

An action was brought by the Union Mutual Insurance Company vs. the Indianapolis and Cincinnati Railroad Company, to deliver goods received on a contract for their carriage from Cincinnati to Cairo, by railroad. A receipt was given by the defendant in these words: "Received of Athearn & Hilbred, in good order and condition, at the depot of the Ohio and Mississippi railroad, the articles marked, &c., which are to be delivered in like good order at Cairo, no avoidable dangers excepted, unto Fowler & Norton, or assigns."

The defense was that the goods were destroyed by a fire, the origin of which could not be ascertained, but which occurred after all the usual precautions to prevent such accidents. And it was claimed that this was an "unavoidable danger" within the meaning of the contract.

Judge Gholson held, that the defendant must be considered as a common carrier, and liable as such unless by the express terms of the contract that that liability is restricted. (13 Wend. Reports, 611.)

That it devolved on the defendant to show that the failure to deliver the goods at the point of destination arose from

It may be doubtful whether the exception of "unavoidable dangers" properly means more than "inevitable accidents," or such acts as the law has allowed to be an excuse. And it may be doubtful whether the law of Ohio permits a common carrier to limit his liability either by notice or special agreement. (*Jones vs. Voorbees*, 10 Ohio Reports, 145-50.)

But no such restriction or limitation will be carried further than the obvious meaning of the words import. The exception in this case of "unavoidable dangers" cannot be construed to change the contract of the common carrier into that of an ordinary bailee, bound only to the exercise of ordinary care and diligence, and responsible only for what are acts of negligence.

Fire, in itself, cannot be considered an unavoidable danger. It is one to which, from the very nature of the mode of transportation, it was to be expected the goods would be exposed, and if an exception from liability, therefore, generally, or only in case of negligence was intended there should have been an express exception. When the goods have been destroyed by fire, the defendant to avail himself of an exception, would therefore, be bound to show the origin or cause of the fire, as if, for example, it had been caused by lightning. It will not be sufficient as in present case, to allege that the cause of the fire is unknown and that proper care and diligence to avoid fire were used. The presumption, founded on public policy, will be, that the cause or origin of the fire might have been avoided and the defendant must show what it was and that it was unavoidable, and until it is shown what the cause or origin of the fire was, the question whether and how it could have been avoided, does not properly arise. Judgment will be entered for the plaintiff.

The following is the answer some time since put in by the Baltimore & Ohio Railroad Company to the Bill of the State of Maryland upon which the injunction now pending was granted. The case is now before the Court for final decree :

To the Hon. William George Krebs, Judge of the Circuit Court for Baltimore city:

THE ANSWER OF THE BALTIMORE & OHIO RAILROAD  
COMPANY TO THE BILL OF COMPLAINT OF THE STATE  
OF MARYLAND.

These respondents, saving to themselves the benefit of all exceptions to the said bill of complaint by reason of the insufficiencies thereof, and desiring to answer said bill as far as they deem to be material, competent and proper, answer and say as follows:

These respondents admit their incorporation and the acts supplementary thereto, and that the complainant holds the amount of stock in manner and form as set out in the Bill of Complaint. These respondents further admit the guarantee of a perpetual dividend of six per cent. per annum in the manner stated in said bill. They also admit that they accepted said act of incorporation and proceeded to construct and keep in repair said road, but the same was not opened by a continuous line to the Ohio river until the month of April, 1853; and they further admit that they undertook and contracted and assumed the duty on themselves to construct and complete said road, and keep it in repair and use for the purposes of their said incorporation, and for that purpose to use all the means set forth in said bill.

And these respondents admit that the capital and revenues of the road were not sufficient, and they were compelled to borrow, and did borrow and raise large sums of money for the purposes and in the manner stated in said bill.

And they further admit that complainants' exhibit No. 2 is a true copy of a resolution passed by the Board of Directors in manner and form stated in said bill of complaint.

They do not admit, but deny that surplus or net profits have in fact been made by these respondents, either annually or semi-annually, if by such "surplus or net profits" are meant the net earnings over and above the payment of all expenses of constructing, repairing and working their said road, and the payment and discharge of all debts and liabilities contracted by them in the legitimate prosecuting of the objects of their incorporation; but they do admit that surplus or net profits over and above the current expenses have from time to time been earned by your respondents and applied at different times, in the shape of dividends thereof, to the benefit of the stockholders other than the dividend or alleged dividend declared on the 17th day of December last, as stated in said bill of complaint, and which dividends have been paid, and are not now in controversy in this cause.

These respondents further state that the amount of thirty per cent. declared on the stock of the company as an extra dividend, to be paid to the stockholders on the terms and in the manner stated in exhibit No. 2, filed with the bill of complaint, is intended to represent, and does in fact represent supposed or alleged surplus net profit accruing or supposed to accrue during a series of years, and the same is composed in part of the alleged surplus or net profits for and during past years, in which the President and Directors of your respondents had from time to time declared and paid over dividends to the stockholders; and your respondents state and charge that all the supposed surplus or net profits re-



ceived by your respondents for said series of years antecedent to the 1st of October, 1856, and especially those received for the years ending October 1st, 1853, 1854 and 1855 were absorbed and actually and absolutely used and applied by your respondents in and about the construction, repair and equipments of their said road; and your respondents especially refer, in this connection, to the annual reports of said years, as well as to the other antecedent reports, and which, when filed, are prayed to be taken as part hereof.

Your respondents aver and state that the said dividend of thirty per cent. is based upon and intended to represent, and does in fact represent supposed surplus or net profits, which were actually used, applied and absorbed as aforesaid, and they are advised and charged that the said supposed surplus or net profits so used, applied and absorbed as aforesaid, cannot and do not in the nature of things exist, except in the works and improvements of the company, and the same being thus absorbed and expended are now, and were on the 17th day of December, 1856, incapable of being divided.

These respondents, further answering said bill of complaint, do hereby deny that there was any intention on their part, at the time or times, and each and every of them respectively, of appropriating said supposed or alleged surplus or net profits now represented in said extra dividend, to the expense of constructing, repairing and equipping said road, to regard the same as money borrowed from the stockholders, and to be repaid to them at some future time as a debt or legal obligation of these respondents.

And they further deny that such supposed or alleged surplus or net profits so as aforesaid used, applied and absorbed without any intention on the part of these respondents, as aforesaid, to repay them to the stockholders, can be converted into a debt or obligation, legal or equitable, by the simple action of the Board of Directors taking place long subsequently to such use, application or absorption, and these respondents emphatically deny that it is competent for their Board of Directors, by a resolution, declaring dividends, when in fact there are no real, tangible or actual net profits or earnings represented in cash or valuable available securities, to create a debt or obligation where none existed before, and they desire to make this statement to protect the real interests of their creditors and stockholders from being prejudiced and damaged by the imposition of a new and onerous debt in the shape of dividends bearing interest and convertible into capital stock, or in any other way binding, impairing or affecting the credit, assets and property of these respondents.

And these respondents, further answering, say and aver that it would be unsafe and dangerous, as well as unsatisfactory, to look to the annual reports of their President and Directors for the manifestation of a sufficient corporate intention on the part of these respondents to return to the stockholders the net or surplus income (over and above ordinary and current expenses) used and applied in constructing and equipping said road, or in any way to regard the same as a debt, legal or equitable, inchoate or executed, liquidated or unliquidated, because said annual reports are contradictory and inconsistent, vague and inconclusive as to the fact of such corporate intention, some of them expressly negating the idea of any such intention, and none of them distinctly manifesting the same, and your respondents beg leave, in illustration of the truth of this averment, to rely especially on the sixteenth annual report of the President and Directors, made on the 7th of October, 1842, in which, among other things, will be found the following language: "To guard against such consequences, the Board thought it best to consult the true interests no less than the wishes of the stockholders, to apply the income to the vigorous prosecution of the work, faithfully and promptly to comply with its obligations, and to uphold its credit—looking forward to the superior profits of an extended work ultimately to reimburse any temporary suspension of an annua dividend." Thua, as your respondents charge, clearly showing that there was no intention to reimburse to the stockholders for the suspension even of the annual dividends, in consequence of the application of the net revenues (over and above the ordinary and current expenses) otherwise than by the superior profits which the stockholders ought at some future time to receive from their road as extended and improved by the application of the net revenues as aforesaid. These respondents further aver and charge that by the 28th annual report, made on the 1st of October, 1854, it was especially declared that not only the entire net earnings of that year, after deducting the total disbursements of all kinds under the head of expenses for the year's earnings, which said net earnings are there stated as \$1,619,897 74, were required and consumed in the payment of existing responsibilities of the company, but that the said net earnings, the restored credit derived from a loan of five millions then contracted, and a part of said loan itself were required to preserve the capital invested from the mortgages of the property of the company, and that, by the 29th annual report, made on the 1st of October, 1855, it appeared "\$790,244 05 being the clear gain of the year's work on the main stem, was absorbed in the reduction of the debt and other absolutely required outlays."

Your respondents further aver and charge that the idea of an intention to repay to the stockholders the amount of net earnings or profits (over and above ordinary and current expenses) which had been used and absorbed in the operations of your respondents, is expressly negated, also, in the thirtieth annual report, made on the 1st of October, 1856, which especially declares that the company "from its earnings solely can constantly progress in perfecting desirable additions and improvements without incurring further debt."

But your respondents are advised and charge that even if such corporate intention on their part to return to the stockholders at some future time the amount of net revenue which had been used and absorbed as aforesaid, should appear to have existed at the time or times respectively of such use and absorption, such intention could not in law constitute a contract or binding obligation on your respondents, so far as the said net revenues, or any portion of them, were derived from the tolls and receipts of that portion of the road which passes through the State of Virginia, subsequently to the 7th day of March, 1847, and prior to the month of April, 1853, when said railroad was opened to a depot on the northern side of Wheeling creek, in the city of Wheeling, because these respondents did legally accept the terms and benefits of an act of the General Assembly of the State of Virginia, passed on the 7th day of March, 1847, entitled "An Act to authorize the Baltimore & Ohio Railroad Company to construct the extension of their railroad through the territory of Virginia," and by such acceptance subjected themselves to the terms and conditions of a certain other act of the State of Virginia, passed on the 11th day of March, 1837, entitled "An Act prescribing certain general regulations for the incorporation of railroad companies," as will more fully appear by reference to said acts of Virginia, which these respondents pray may be taken as part of this answer, and may be read from the printed volumes of the statutes of that State, or from other authentic evidences thereof, at the hearing of this cause. And your respondents are advised and charge that by virtue of the premises, no dividend whatever of net profits arising within the period above designated from that portion of the road running through the State of Virginia could lawfully be declared; and they charge that by virtue of the premises, and by force of such legislation of the State of Virginia and the acceptance thereof by your respondents, no contract or intention to return to the stockholders the net profits as aforesaid arising or derived, and which had been used and absorbed in the legitimate operations of these respondents, even if such contract or intention were shown, which is denied, could be legal or valid, because, as your respondents aver, the same was founded on no legal, valuable or sufficient consideration whatever, but the same would be interdicted and annulled by mere force of the said legislation of the State of Virginia in the premises.

And your respondents further show and aver that said extra dividend set forth and shown in said bill of complaint does include, as part and parcel thereof, the net revenue, actual or supposed, which arose from so much of said road as passes through the State of Virginia, and which said said revenues constitute a material integral part of said extra dividend, and are represented in the same in such manner as to be now wholly incapable of separate ascertainment and apportionment from the other integral and constituent parts of said extra dividend; and your respondents are advised and charge that by reason of the premises the said dividend is wholly illegal and void, and ought to be cancelled, rescinded and annulled.

And these respondents, further answering, say that by the thirtieth annual report of said company, made October 1st, 1856, it does appear that there stood to the credit of the profit and loss account the sum of \$3,333,071 75, inclusive of the dividend then declared, yet that they do not admit, but, on the contrary, expressly deny, that the said sum can, in conformity with the charter, be made the subject of any dividend, either in cash, bonds or certificates of indebtedness, or be made the foundation for a distribution of new shares of stock amongst the present or past stockholders, because the said balance is made up in a great and material degree by withholding from the debit of said account large sums of money which these respondents are advised and therefore charge, ought to have been treated as repairs and expenses, and charged to current disbursements, but which were erroneously charged to construction or to reconstruction, and by crediting said account with increments of sinking funds and other items, which merely serve to swell the said apparent balance, but are incapable of being realized for purposes of division, and because said balance of profit and loss embraces and is constituted, in part, of sums credited to the revenue of the company during a long series of years, but not actually received by said company from any third party, but erroneously and fictitiously accounted as revenue, the same being charges made by the said company against themselves for the transportation of their own iron and other materials on their own road, and these respondents are advised that the said revenue or sums so derived, and supposed and treated by said company as profit, and credited as such, when the same were never actually received, but when, on the contrary, the cost of the transportation of said materials was an actual outlay of the other income of the said company, is wholly illusory and unreal, as representing divisible net profits, and any dividend founded thereupon as divisible net profits, or any augmentation of capital founded thereupon as divisible net profits, is, of necessity, wholly unwarranted by the charter, which only contemplates dividends of profits actually and substantially earned by said company in transactions between the said company and third parties.

And these respondents therefore charge that the said apparent balance of \$3,333,071 75 ought to be subjected to the abatements herein before stated, and others, which would reduce the same greatly below the sum of \$3,000,000, and that the same ought, in addition to the said other deductions, be reduced by the amount of \$1,016,800, already represented by the stock held by the Baltimore & Ohio Railroad Company in the Washington Branch—which said several reductions will reduce the said apparent balance far below the said sum of \$3,000,000 proposed to be divided by said resolution of December 17th, 1856.

These respondents, further answering, say that they owe

large amounts—not less, in the aggregate, than ten millions of dollars—all of which is bearing interest, and maturing at different periods in the future, and your respondents are advised and charge that there being, as herein before shown and charged, no actual indebtedness on their part to the stockholders, and there being, on the 17th day of December, 1856, the date of the aforesaid extra dividend, not one dollar of the amount of said dividend on hand, in money or on deposit, it was not competent for your respondents, by their Board of Directors, or in any other way, to create or fasten on your respondents, in the shape of dividends, an interest bearing debt for a term of years, after which the principal of said supposed indebtedness should be convertible into capital stock.

And your respondents are advised and charge that, under the circumstances set forth, the declaration of said dividend by the Board of Directors was, in judgment of law, but a nugatory attempt to convert the stockholders into creditors as far as the said dividend would entitle them to interest as therein declared, and therefore inoperative against your respondents.

These respondents further state and charge that, as far as the amount of said extra dividend is to be convertible into capital stock of your respondents, the same is illegal and void under the terms and provisions of their charter and supplements thereto, because your respondents have no power to increase their capital stock except in the manner and for the purposes prescribed by their said act of incorporation and the supplements thereto; and your respondents, emphatically deny that the same can be increased merely to enlarge the capital stock for distribution among the stockholders, or in any other way than by actual subscriptions of money for the new shares, or by increasing said shares of capital stock for the purpose of selling them at not less than their par value, for the benefit of the company.

Your respondents are advised and charge that, whether the said extra dividend be regarded as a donation to the stockholders of the amount therein specified, or as a payment offered to them in satisfaction of money borrowed from them through a series of years, the same is equally null and void, because unauthorized by the terms of the charter and the acts supplementary thereto.

These respondents further show and charge that a majority in value of their stockholders have elected to repudiate said extra dividend, and have refused to accept the same in manner and form as declared, and they submit to your Honorable Court whether, under said circumstances, they ought not to be protected, and to what extent, in the premises.

Your respondents also submit to your Honorable Court the question to whom said dividend equitably belongs and is payable, even if the same shall be held legal and valid as a return of monies borrowed in past years from the stockholders, with an intention on the part of your respondents to return them, and in submitting the question your respondents show and aver that the parties who held stock on the 22d of December, 1856, or on the 17th of December, 1855, the date of declaring said dividend, were not the same parties who held said stock at the respective dates when the alleged surplus or net profits designed to be represented in said extra dividend were used, applied and absorbed as hereinbefore stated, and these respondents pray to be protected in the premises from all loss, damage or prejudice which may result to them by payment of said dividend to parties not equitably entitled thereto, in case the said dividend shall be otherwise held to be lawful by your Honorable Court.

And these respondents further say that they know nothing of the combination and confederacies charged in the bill of complaint, and do not admit the same, and, considering that they have fully answered the said bill of complaint without answering the special interrogatories of said bill, pray that such decree may be passed as will protect the interests and rights of your respondents, and as in duty bound they will ever pray, &c.

And in verification of the matters herein set forth, these respondents have caused their corporate seal to be hereto attached.



ROBERT J. BRENT,  
For Defendants.

True Copy—Test—WM. H. H. TURNER,  
Clerk Circuit Court for Baltimore City.

**J. T. CRAPSEY,**  
**ATTORNEY AT LAW,**  
OFFICE:  
N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

G. W. MORRILL. G. B. BOWERS.  
**MORRILL & BOWERS,**  
Successors to and members of the late firm of  
C. WASON & CO.)  
**CLEVELAND, OHIO,**  
Are prepared to execute all orders for  
**Railroad Cars of Every Description.**

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.



## GENERAL

## RAILWAY SUPPLY AGENCY.

SNOOK &amp; HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

JOHN W. KELLY,  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

## RAILROAD ENGINES &amp; CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE &amp; TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

## BUSH &amp; LOBDELL

Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

## TIRES,

For R. R. Cars &amp; Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles,

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

## TO PRINTERS.

Large Cylinder Hoe Press

FOR SALE.

We offer for sale one large cylinder Hoe Press, nearly new. This press cost \$2,500 in New York, and will be sold for \$1,000 if application is made at once.  
Address WRIGHTSON & CO.,  
167 Walnut street, Cin'ti, Ohio.N. B. A large assortment of Chases of nearly every size, suitable for country offices, for sale cheap.  
ap8-1m W. & CO.

## W. G. HYNDMAN'S



## Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

## Railroad Iron.

2000 TONS RAILS, Erie pattern, weighing about 56 lbs. per yard, in port and to arrive; for sale in lots to suit purchasers, by  
my8-1m M. K. JESUP & CO.,  
44 Exchange Place, New York.

## FOR SALE.

TWO HOUSES nearly finished and lots, and one vacant lot in Edinburg, Ind. There are two railroads passing through the village. This property will be sold low for cash or Southern Pacific or Ohio & Mississippi Railroad stock. Address  
ap8-1m WRIGHTSON & CO.,  
167 Walnut street, Cin'ti, Ohio.

## SILVER, GOLD, LEAD,

And Other Minerals,

ON THE PROPERTY OF THE  
Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &amp;c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,

Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O.

## Norris' Locomotive Works.



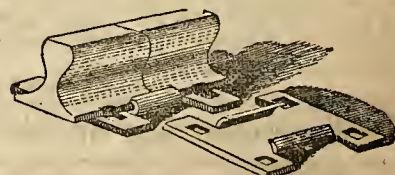
PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. RICHARD NORRIS & SON.

## RAILROAD SPIKES.



WROUGHT IRON

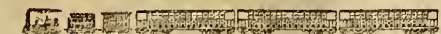
## Chairs and Fastenings.

THE undersigned will continue to manufacture with increased facilities, HOOK &amp; FLATHEAD R. R. SPIKES, of all Patterns, WROUGHT and CAST CHAIRS, and FASTENINGS, BOILER RIVETS, BOLTS, SHIP and BOAT SPIKES, &amp;c. &amp;c.

The best quality of refined iron is used, and all orders filled with dispatch.  
J. HOPKINSON SMITH  
No. 25, South CharlesPlease direct the name in full.  
Baltimore August 31-7



## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
Robert Harris, Sup't.  
Racine, May 15, 1857.

## Harlan & Hollingsworth,

WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
**MACHINERY.**

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Rawdon, Wright, Hatch & Edson,

BANK NOTE  
ENGRAVERS AND PRINTERS.

Is engraving in a style corresponding in excellence with that of Bank Notes—

RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

PATENT PORTABLE CIRCULAR S&W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor irons and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all propositions made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
a1 r2 Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan-ly] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and others

LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Candlesticks, Brass and Tin Globe and Egg Guarded

LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.,

Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

STEAM WHISTLES,

Cylinder and other kinds of Oil Cans and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

WASTE,

Baggage Barrows and Checks, Freight Trucks,

CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY FILLED.  
oc23-ly

## E. MENDENHALL,

MAP, BOOK & PRINT SELLER,

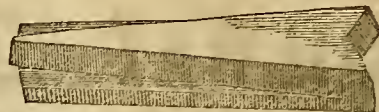
Has constantly on hand GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers, Geological and Astronomical Charts, Globes, MICROSCOPES, TELESCOPES DRAWING INSTRUMENTS, &c.

Publisher of the Railway Map of the Western States, In Sheet or in Pocket Case;

The LARGE SECTIONAL AND RAILWAY MAP OF OHIO the LARGE MAPS OF CINCINNATI, and HAMILTON Co. Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA MAPS OF EVERY DESCRIPTION.  
mh22

## Important to Railroad Companies, etc.



## Leavitt's Railroad Frog-Points, Cast Steel Tools, etc.

THE undersigned, having discovered that cast steel, in a liquid state, can be moulded into any shape or form, are, by means of this valuable discovery, manufacturing

## RAILROAD FROG-POINTS,

Lathe Mandrels, Gauges of every description for blacksmiths' use; Steps for Mill Spindles and Shafting, Swage Hammers, and almost all the different variety of tools which are difficult to forge. Articles made in this manner, are much superior to forged productions, as the steel out of which they are manufactured, loses none of the carbonic element, but retains it in all its original purity, while under the repeated beats to which it is subjected by the old and tedious process, it loses much of this valuable property. They are also produced in a much more perfect state, needing little or no fitting or dressing, having all the accuracy of shape which moulded articles possess. They can, also be furnished at one-half the cost of the others.

The qualities of the Frog-Points have been already tested by the Ohio and Mississippi Railroad Company, to whom the manufacturers are furnishing them through G. Recker & Co., Cincinnati.

Measures have been taken to secure a patent for this valuable invention. LEE & LEAVITT,

15 Walnut st., Cin'ti.

N. B.—They would also call the attention of the public to their valuable and extensive assortment of cast steel saws, and circular saw mills, etc.

## ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE OF, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYE METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles CHAS. W. COPELAND, Consulting Engineer, 64 Broadway, N. Y.

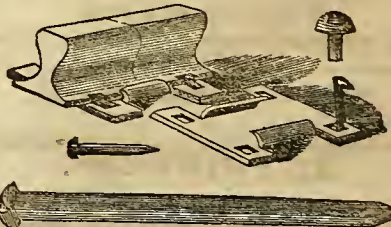
## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD. RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.  
mar-ly

## GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio. Please direct name in full.

feb 23 CORBY, GOSSIN & Co.



## Most Direct Route to the East.

### BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route.

#### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. For the West and South, as above.

ap10

Sup't Terre Haute & Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducting. Sold at wholesale at great discount from list prices.

cc33-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING.

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

#### TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Philadelphia in.....	14 "
To Wheeling in.....	31 "
To Baltimore in.....	10 "
To Washington in.....	29 "
To Steubenville in.....	1 "

#### FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

#### FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

Freight—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Clin. and St. Louis Omnibus L.

Office No. 2 Burnet House.

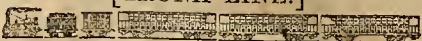
1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton & Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:20, 4 and 6:30 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities.—Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M. INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M. MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburg, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via, Clyde, through to Cleveland at 9 P. M., making close connection with

### LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train, which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

### "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 19 hours shorter than by any other route.

The 2:30 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:20 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

#### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

#### RETURNING TRAINS

Leave Dayton at 5 and 8 A. M., and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 5:15 and 10:25 P. M.

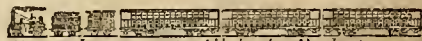
For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU & INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Freight Ag't.

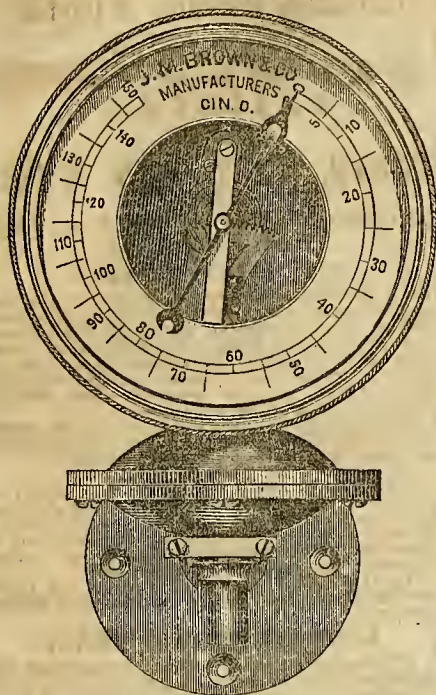
Indianapolis, Sept. 16, 1856.

[mh29-1y.]



**J. M. BROWN & CO.,**

MANUFACTURERS OF

**IMPROVED  
Corrugated Steel Spring Gauges,**

FOR

**LOCOMOTIVES AND STATIONARY ENGINES.**

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

mar 26 250 East Front street, Cincinnati, O.

**Prosser's Patent  
LAP-WELDED  
IRON BOILER TUBES,**

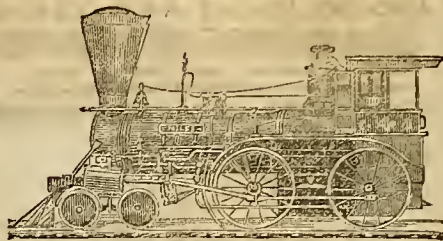
Every article necessary to

**DRILL THE TUBE-PLATES**

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

**LOCOMOTIVE WORKS.****NILES & CO.,**

CONGRESS STREET, CINCINNATI.

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.  
Feb. 13 1855-Gm.

**RAILROAD IRON.**

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 2, 1855. 9 South William Street.

**A. B. LATTAS****Patent Mercurial Steam Gauge,**

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

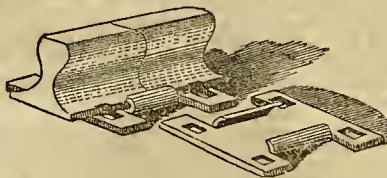
We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

ap 17

A. B. &amp; E. LATTAS.

J. D. GREEN.

C. S. GREEN.

**CINCINNATI RAILWAY****CHAIR WORKS,**

ESTABLISHED JAN., 1852.

south Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN &amp; BRO. PROPRIETORS,

WE have in use improved machinery, capable of turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

**Wrought Iron Chairs.**

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.  
J. B. GREEN & BRO.

Feb. 14 1y.

**THE SCHENCK  
MACHINERY DEPOT  
AND**

**Leather Banding Manufactory,**  
No. 163 GREENWICH STREET,  
NEW-YORK,

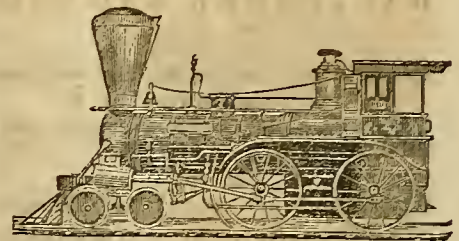
KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Up-right Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

**Oak-tanned Leather Belting,**

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

**CINCINNATI  
LOCOMOTIVE WORKS.**

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap 20 MOORE & RICHARDSON.

**Railroad Car Findings**

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS.**

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**

Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trim-  
mings for win dows and Seats. Varnish, Coach Japan  
and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
to c6.

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

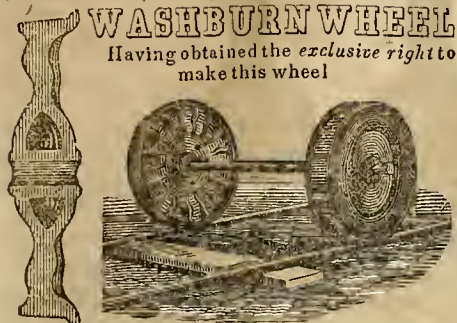
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps at a team Pumping Engine at the 1st Fair Ohio Mechanics' Institute. June 18, 1855-1



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,  
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th **JOSEPH DAVENPORT.**

### S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j **NEWARK, N. J.**

## ALBERT M. SMITH'S PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or Low-back Seat, combined in one,  
**PATENTED AUGUST 21, 1855.**

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it, and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

### ALBERT M. LEA, CIVIL ENGINEER, KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
**LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,**  
190 Water Street New York.

### RAILROAD MAP OF UNITED STATES NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 3 College Hall, Cincinnati O.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y.

**THOMAS D. STETSON,**  
**Mechanical Engineer,**  
AND  
**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 26 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.  
Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions. oc23

### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

aug14 ly **P. DUDLEY,** President of the Board.

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 56 to 59 lbs. per lineal yard, now at New Orleans, for sale by **VOSE, LIVINGSTON & CO.,** feb19-1m 9 South William street, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** no13 10 Wall st., near Broadway, New York.

### IRON BOILER FLUES, PASCAL IRON WORKS.

**MORRIS, TASKER & CO.,**  
Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES.**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.  
**PHILADELPHIA.** [aug]

### RAILROAD IRON.

### LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also; several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.] **A. H. GOODMAN & CO.,** no. 7 Wall st., N.

### RAILROAD CAR

AND  
**COACH TRIMMINGS.**  
**DOREMUS & NIXON**

No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**

### IMPORTERS

OF

**Plain and Figured Mohair Plush**

Printed & Unprinted, Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**

**Enameled Cloth, for seats & backs of Cars;**

**ROPE MATTING, Every Width;**

Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

### PATENT FELT.

**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in bond for exportation.  
sep13 **DOREMUS & NIXON**

### RAILROAD RECORD,

**BOOK & JOB PRINTING OFFICE,**

**167 WALNUT STREET,**

Between Fourth and Fifth Sts., Cincinnati.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINKLANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.****JAMES HARRISON JR.'S****Automatic Steam Whistle,****FOR LOCOMOTIVES.****PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 52d street, N. Y.

**T. F. RANDOLPH & BRO.****Mathematical Instrument Makers,**

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

**RAILROADS, STEAMBOATS,**  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern mend-ers.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 ly 119 Walnut st., Odd Fellows' Building:

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**

edgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton &amp; Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vick-burg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,

—AND—

**Blank Book Manufacturers,****No. 112 MAIN STREET,****East Side, between Third and Fourth Streets,**

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

**RAILROAD AND OTHER BLANKS.**

Printed to order in the best manner.

**Ruling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

**ARE** prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS and AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oil and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 225 H Street, Washington, D. C.

ap12

**Thorough Bred Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,****"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, }  
W. WRIGHTSON, } Editors.

CINCINNATI:

THURSDAY MORNING,.....JUNE 25, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " " per month .....	3 00
" " " six months .....	12 00
" " " per annum .....	20 00
One column, single insertion .....	4 00
" " " per month .....	10 00
" " " six months .....	40 00
" " " per annum .....	80 00
One page, single insertion .....	10 00
" " " per month .....	25 00
" " " six months .....	110 00
" " " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 18.

#### EDITORIAL.

The Savings of Industry; or the Accumulation of Capital by Savings Banks.....	285
Brevities.....	287
New R. R. Signals, Preventive of Collisions.....	287

#### CORRESPONDENCE.

On a Pacific Railroad from the Mississippi or Some Point not far West of it.....	286
Sabine & Galveston Bay R. R. & Lumber Co.....	286

#### RAILROADS.

Alabama & Florida R. R.....	288
Chicago, St. Paul & Fond du Lac R. R.....	290
The Southern Railway Movement.....	290
New Albany & Salem R. R.....	294
Baltimore & Ohio R. R.....	294

#### MISCELLANEOUS.

Pennsylvania Main Line.....	289
Railroad Loan.....	289
Mr. Bancroft on the Great R. R. Line.....	290

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	292
London Quotations.....	293
Monetary and Commercial.....	293
Sales at the New York Stock Board.....	293
Cincinnati Stock Sales.....	293

### HAND BOOK OF RAILROAD CONSTRUCTION.

—The above is the title of a handsome octavo book of 480 pages, embellished with 158 illustrations, designed for the use of American Engineers, and containing rules, tables and formula for the location, equipment and management of railroads, as built in the United States. The work was prepared by George L. Vose, Civil Engineer. It is divided into systematic chapters. It begins with a general view of the rise and progress of railroads, the preliminaries of railroad building, including reconnaissance of the route, survey of the line, final location, specifications, contracts, bids, etc., laying out the work, earthwork, rockwork, bridging, masonry, foundations, superstructure, equipment and management.

The work is one which will meet the wants of the engineer, and is invaluable, as a book of reference and consultation.

The book is published by J. Munroe & Co., Boston, and for sale by Rickey, Mallory & Webb, of this city.

VOL. 5.—No. 18.

### THE SAVINGS OF INDUSTRY; OR, THE ACCUMULATIONS OF CAPITAL BY SAVINGS BANKS.

A gentleman in New England, who had dealt for twenty years in pork, and handled millions of money,—remarked, that he thought on a fair balance of accounts, that he had neither gained nor lost much, by the pork trade. He had, however, saved a large property, and said, that if the subject was examined properly, it would be found, that nearly all large fortunes were made by *saving*. In the accumulation of capital, this is undoubtedly true to a great extent. For, although large profits are made, yet they are often spent as fast as made. A fortune may be saved out of a small income—while one may be lost out of a large income by extravagant expenditures. We see this illustrated in all walks of life; but the principle of *saving* is never so advantageously employed, as when it is applied to the industry of the working population. For, this is far the most numerous class, and their thrift, or their extravagance will tell largely on the interests of the community. In the present generation, we have an institution which enables us to ascertain in part the *savings* of industry, among those not engaged largely in commerce or business. This is the Savings Banks.—These institutions have few depositors from the wealthy class. They are almost exclusively made up from the working people; not merely laborers, but small mechanics, traders, clerks and salary men. They are the savings mostly from the wages, and salaries of industrious people, who live on small means. In some of the States, like New York and Massachusetts, we have the operation of Savings banks on a large scale, and can determine very nearly the savings of this class. In the report of Mr. KELLY to the New York Senate, we have a full statement of the operations of Savings Banks, in a State, where they are popular, and large numbers of people deposit in them. We give the results:

Deposits in the State for 1855 ..... \$19,156,215  
do withdrawn ..... 18,217,508

Increase ..... \$938,707

It thus appears, that there was a *net* gain of the savings in these banks, during 1855, of nearly a million of dollars. The average amount of the deposits was only \$73.60. In the year 1856, the operations were:

Deposits in 1856 ..... \$22,563,855  
do withdrawn ..... 18,69,063

Increase ..... \$3,994,792

In this year, then, the savings of industry reached nearly four millions; indicating that the condition of the working classes was much better in 1856, than in 1855; and undoubtedly this was the fact. It was in the fall of 1854, that a great commercial shock was experienced, and the railroad interest became greatly depressed. Many work people were thrown out of employment, and it was

not till in 1856, that an entire recovery from this shock was experienced. Thus, we see the savings of 1856 greatly enlarged over those of 1855. The increase in the two years of aggregate deposits was:

In 1855 ..... \$938,707  
In 1856 ..... 3,994,792

Aggregate ..... \$4,933,499

This was the increase of deposits; but, as the banks had likewise investments, the real increase of their means was larger.

As these banks must be ready to pay their depositors on demand; and must, at the same time make a profit for them out of the deposits; the great bulk of their means is invested in stocks, or bonds, which are of ready sale; so that they can be disposed of at short notice. The investments of these banks on the 1st day of January 1857 were, as follows:

Stocks ..... \$17,008,620  
Bonds ..... 18,570,698  
Cash and Cash Securities ..... 6,499,737

Total ..... \$41,699,502

These investments are all made on the most valuable productive property; so that they can be made available at any time. The income derived from them were, as follows:

From Stocks and Securities ..... \$1,007,482  
From Bonds and Mortgages ..... 1,177,698

Total income ..... \$2,175,180

Of this \$224,000 was retained, and the residue paid to the depositors, and expenses.

The number of *accounts* in the Savings Banks, on the 1st of January, 1857, was 204,375. This indicates, that there were the same number of depositors. New York has about 3,600,000 people; so that about 1 in 18 of the whole population are depositors in Savings Banks. As families contain an average of six persons, and only one person in a family can be suffered to deposit, it is a fair inference, that about 1,200,000 persons, or one-third the entire population of New York is represented in the Savings Banks.

If we assume the years 1855 and 1856 as fair samples, we have \$5,000,000 accumulated in two years by the *savings* of 1,200,000 persons; that is, each of these persons average a saving of \$2 a year, or \$12 to each family. Take a single family and this looks small; but look at it taken in connection with *time and use*. At this rate, in ten years, from 1856 to 1860, the State of New York would accumulate *twenty-five millions* from the small savings of the people of smallest means. This is certainly something of importance; but this is not all. Each year these depositors have received a million of dollars as interest on these deposits. In ten years these deposits draw ten millions of interest, and this, too, is all a clear saving; for, if the savings had not been made originally, this interest would not have existed. So that, in fact, New York *saves* in ten years thirty-five millions of dollars by Savings Banks! In addition, this saving teaches habits of economy, thrift and industry. In every point of view Savings



Banks are useful and salutary. They should be commended to the adoption of those States and cities where they do not exist.

#### ON A PACIFIC R. R. FROM THE MISSISSIPPI OR SOME POINT NOT FAR WEST OF IT.

If we look at the structure of the globe, we find the great resources of the land always considerably distant from the ocean—often, to a certain extent, accessible by navigable rivers, bays, or inland seas; but still, in greater part, beyond trade and commerce, except by roads. Roads in former ages, though greatly advantageous, could not equal even the advantages of sailing vessels. Placea between which such vessels could ply, had a great superiority in this respect over those between which roads were the only mode of transit. The invention of railroads has nearly equalized places *now*, so far as communication by shipping and by railroad transportation are concerned. Heavy articles, particularly those combining bulk and weight, are still more advantageously carried by sea than by land; but for passengers and a large part of merchandise—much of it extremely valuable—the modern railroad has the pre-eminence. Keeping in view all these facts, we may safely affirm that for the largest areas of cultivation, and for the greater value of merchandise transported from place to place, railroads will be most used in trade and commerce. That which the ocean, including its bays, and the rivers as far up as tide-water runs, supplies for human subsistence and comfort, is probably not more than a sixth of the supply contributed by the land. Coal and iron, and the cereals, besides immense varieties of agricultural products, must reach water navigation, in far the greater part, by railroads. They form, with a facility and a *rapidity* unknown to navigation, so many radii of transportation tending to common centers, and accumulating in each of these great centers an amount of wealth which, for the want of them, the ancients could not have. A few great cities they might and did have, rivaling the moderns; but such a multiplicity of them, filled with the varieties of agricultural production and valuable manufactures, was to them impracticable. Railroads advance the wealth of a State more than any other mode of conveyance, because they are constructed upon and intersect in all directions the land, which, and the people upon the land, are the great producers of everything ministering to human subsistence and comfort. I have seen it stated, in an account of the very recent railroad meeting at Bristol, Tenn., to devise a plan for a direct steam line between England and the waters of the Chesapeake Bay, that the railroads of Virginia have increased the value of the property of that State one-third. They have done more than this for Ohio; they have at least doubled that of Illinois. Similarly to their operations in those States will be their effect

in regard to the Pacific Railroad. A great trunk railroad is built, which in a short time gives rise to various lateral roads, communicating with regions before unknown to trade, and abundant in the means of it.

The Pacific Railroad from the Mississippi or some point not far west of it, by El Paso and on to San Diego, with a branch to San Francisco, is the most magnificent trunk railroad on the globe, or which it is possible to construct with equal facility. It passes through regions of agriculture in the South-Western States—in Arkansas, Louisiana and Texas—of the very highest value; it claims cotton also as one of its chief products for transportation; and it sweeps on in the neighborhood of mineral wealth, now in a process of development, of the most valuable kind. As appears from letters of Mr. C. D. Poston, Agent of the Sonora Exploring and Mining Company, very valuable silver ores have been found and tested, which promise a great percentage of the precious metal, and which lie, in part, within a few miles of this road. And there is good reason to believe that a large tract of country in the Gadsden Purchase is characterized by immense mineral wealth; a mountain of iron has been discovered. The very fact of this discovery would argue, unless there were in that locality a striking anomaly in the laws of nature, the existence of coal abundantly in the same vicinity. The Providential arrangements for man's subsistence are not imperfect; beside the iron mine the coal mine is usually placed, that the utility of the former may be fully developed; and so we have, in this instance, disinterested testimony that coal exists not far from this iron mountain. A live oak forest has also been found, which, for the purposes of the railroad, will very probably be eminently useful. These important discoveries of the Sonora Exploring and Mining Company, with the other details of their proceedings, show that, besides their direct objects, the Pacific Railroad itself will be highly benefited by their activity and intelligence. This will very probably prove a land of *silver*; and, passing on a few hundred miles further, we come to the land of gold, our own California, and to that great ocean which embosoms a fifth continent, believed by many no less to abound in gold than California itself. The vast shores of Asia, too, swarming with population, will become tributary to this railroad.

Solomon built Tadmor, or Palmyra, in a desert, where there were but few oases; but his character for wisdom was justified by the event. He saw its favorable situation for a caravan commerce with Central and Eastern Asia, according to the then existing state of population and commercial intercourse, and Tadmor rose to be a queen of cities. It was simply as a great depot and thoroughfare of commerce that it reached its eminence. In

the long space, and on the line of fertile country which the Pacific Railroad by El Paso and the mouth of the Gila will occupy, we may certainly calculate that cities will arise of at least a second rate magnitude. I do not speak of those which will be the termini of the road, but of those intervening. Those countries need only the facilities of this railroad to bound forward as Ohio, Illinois and other States have done by railroad improvements. A salubrious and, in a large part of it, a delightful climate, and a soil productive of all the necessities and many of the luxuries of life, will contribute an important part to the advantages of its superior local position. And, to crown the whole, the work is fairly begun, will be pushed forward with energy and completed, to the discomfiture of the croakers, who, nevertheless, will share in its benefits.

W. A.

#### SABINE, GALVESTON BAY R.R. & LUMBER CO.

HOUSTON, TEXAS, May 30th, 1857.

EDITORS RECORD:—I am obliged to you for your answer. I wish the Record sent to Houston.

I have just completed a preliminary survey of a railroad from this point to Madison, Orange County, with a view of connecting it with the *Opelousas* road from New Orleans. The distance by survey is 96½ miles in Texas, and 115 in Louisiana, making 211½ miles of road to build between this point and New Orleans.

This road is a link in the New Orleans, Houston, and Great Western Railroad, to pass through Columbus, Gonzales, San Antonio, Fort Clark, and along the valley of the Rio Grande to El Paso, where it will intersect the Pacific Road. A glance at Cordova's Map of Texas, demonstrates that this is the best line, as an East and West line in Texas, from the Sabine River (the boundary between Texas and Louisiana) to Houston. The three fifths of the line is prairie which will become valuable when drained, and two-fifths heavy timber. The only grading that is requisite is a sufficiency of ditching to keep the road bed dry, and no part of the line is distant from cross ties more than eight miles. This is a chartered road, known as the Sabine, Galveston Bay Railroad and Lumber Company. Abraham M. Gentry, Esq., of this place is the Financial Agent, a merchant of high standing and business qualifications. This road is certain to be built.

I am satisfied that railroads will pay better in Texas than it is generally believed they will. The country is fertile, a good climate, and well adapted for railroads, as the country is generally level. The spirit of improvement is beginning to manifest itself. The State aid in the shape of a loan of \$6000 per mile, is a material inducement, but the land bonus is the great consideration. If the com-



panies can only find the means to push their improvements as far as where the lands are located. This is the only point of difficulty. There is a thirst for town speculation which will materially affect the roads, which time alone will remedy. Of course many blunders will occur in railroad management, until experience demonstrates otherwise.

I find Texas to be a great country of undeveloped resources, thousands of cattle running over its endless, fruitful prairies, a good soil and fine climate, but it has not half the energy that it ought to have.

Yours truly

J. D.

#### BREVITIES.

—CINCINNATI, PERU & CHICAGO R. R.—The stockholders of the Cincinnati, Peru & Chicago Railroad Company, at their annual meeting, held at Plymouth on the 1st inst., elected the following named gentlemen Directors for the year:

M. French, Cincinnati; Jesse Higgins, Peru, Ind.; J. L. Brown, John Elam, Rochester, Ind.; D. Brown, Rufus Hewitt, Plymouth, Ind.; W. A. Place, Sam'l Benson, G. Hathaway, Laporte, Ind.

The new Board was organized by the election of M. French, President; W. A. Place, Treasurer; G. Hathaway, Secretary and Solicitor.

—MISSISSIPPI & MISSOURI R. R.—The annual meeting of the stockholders in this road took place at Davenport, Iowa, on Monday, the 1st inst. The following Board of Directors was elected for the ensuing year:

John A. Dix, Wm. Walcott, A. C. Flagg, F. H. Tows, New York; W. B. Ogden, N. B. Judd, Chicago; Hiram Price, Davenport; J. H. Isett, Muscatine.

The Board organized by the election of John A. Dix, President; A. C. Flagg, Treasurer; and Hiram Price, Secretary.

—CHICAGO & ROCK ISLAND R. R.—At the annual meeting of the stockholders of this company, at their office in Chicago, Friday, June 5th, the following gentlemen were elected:

**Directors.**—Henry Farnam, John F. Tracy, Norman B. J. Judd, Chicago; Ebenezer Cuok, Davenport; Lemuel Andrews, Rock Island; C. W. Durant, Albany, N. Y.; Wm. Walcott, Utica, N. Y.; Azariah C. Flagg, Thos. C. Durant, Francis H. Tows, John B. Jervis, David Dows, E. W. Dunham, New York.

**Officers.**—Henry Farnam, President; Azariah C. Flagg, Treasurer; Francis H. Tows, Secretary.

**Executive Committee.**—Thomas C. Durant, Henry Farnam, William Walcott, Charles W. Durant, E. W. Dunham, A. C. Flagg.

—GALENA & CHICAGO UNION R. R.—At the annual meeting of the stockholders of the above road, held in Chicago on Wednesday, the 3d inst., the following gentlemen were elected Directors for the ensuing year:

John B. Turner, W. L. Newberry, Wm. H. Brown, Charles Walker, B. W. Raymond, George Smith, C. S. Hempstead, Thomas D. Robertson, Dexter A. Knowlton, Hugh T. Dickey, Orrington Lunt, Wm. J. McAlpine, Horatio G. Loomis.

—CINCINNATI AND CHICAGO R. R.—The formal opening of this road from Richmond to Logansport, will be celebrated by an excursion train on July 3rd, and a public dinner at Logansport on July Fourth.

—A NEW GOLD FIELD.—New and rich gold fields have been discovered in British Guiana at a place called Tupagan 90 miles from Upata.

—LAKE MICHIGAN & ERIE SHIP CANAL.—The results of the reconnaissance thus far made for this work show that the route by Fort Wayne is the most practicable route for this work. On the other routes the summit would be 350 to 550 above the waters of the Lake. On the Fort Wayne route it would be about 200 feet.

—PEORIA & OQUAWKA R. R.—The following gentlemen have been elected directors of this road the ensuing year.

Wm. S. Moss, Wm. Kellogg, A. C. Harding, N. H. Purple, N. B. Curtiss, T. C. Fields, Jas. F. Gilman, Charles Secor, W. H. Cruger.

—EAST PENNSYLVANIA R. R.—Ground was broken on Thursday last for the construction of the East Pennsylvania Railroad, about six miles east of Reading. The company have a right, under their charter, to construct from the city of Reading to Easton, on the Delaware; but for the present it is not the intention to build any further than Allentown, where they will connect with the Lehigh Valley—thus making complete connection by railroad with the city of New York, via the New Jersey Central Railroad. From Reading westward, the Lebanon Valley Railroad, which will be finished in about four months, will give this road connection with the Pennsylvania Central, the Northern Central—which connects with the Sunbury and Erie Railroad and with Baltimore—and with the Cumberland Valley Railroad, which will soon connect with the Baltimore and Ohio Railroad at Martinsburg. As one of the speakers at the celebration said, "it places Reading upon the great cross-roads, North and South, East and West of the country at their point of intersection."

—ROCK ISLAND & ALTON R. R.—The portion of this road from Maconet where it connects with the Northern Cross Railroad to Whitehall the junction with the Jacksonville and Carrollton Railroad has been let to Messrs Chaplin, Smith and Hughes. The contractors are to grade, cross tie and iron the road and furnish a certain amount of rolling stock.

#### NEW RAILROAD SIGNAL, PREVENTIVE OF COLLISIONS.

L. Solomons Esq., of Savannah has recently invented a system of signals for running trains on railroads with the design of preventing collisions. The following is the description of the system as we find it given by Mr. TREE, Engineer of the Washington and New Orleans Telegraph Company, the signals consist of lanterns placed at intervals of five or ten miles; the shades covering these lights are worked by a current of electricity so arranged that a passing train is always between two lights, thus avoiding a collision, and, which is more common, a run in from the rear. The shades of these lanterns are painted a dead black, and their displacement by a passing train in the day time cannot fail to be observed, thus making it a day as well as a night signal. The apparatus is exceedingly simple. It consists of two levers to each section. These levers are operated upon by an extra wheel attached either to the tender or locomotive, which wheel, depressing the levers, cause them to make a contact at point perfectly insulated from the ground; this point is so connected by an electric circuit with an electro-magnet working a detent attached to the lamp, as to displace and replace by a revolving movement its shade as often as the lever is pressed by its proper wheel; at the instant the train touches the lever a current of electricity is passed over a wire, operates upon the lamp shades, and exposes a glaring light, which is a certain proof to the engine man that he has also sprung his lamp five miles ahead. He feels safe now, because he has notified not only the approaching train, but the following train, of his whereabouts; at length he reaches the distant lever, strikes it, conceals the light five miles behind him, opens another five miles ahead, and leaves a light exposed at a lever he has just struck, and thus alternately displaying and concealing his light, he pushes ahead with the pleasing reflection that he is secure against collisions, and that he carries on his own train the means of always providing against that danger.

RACINE & MISSISSIPPI R. R.—The earnings of the Racine and Mississippi Railroad Company in the month of May were \$31,143.11 on seventy-one miles of road—equal to \$436 per mile. This road was opened to Durand, eighty-six miles from Racine, on the 26th of May.

CHICAGO & BURLINGTON R. R.—The earnings of the Chicago & Burlington Railroad line for May, were:

	Freight.	Pass.	Miscel.	Total.
May, 1857..	\$117,533.67	\$32,915.37	\$2,544.49	\$172,993.53
May, 1856..	86,580.83	54,684.14	1,783.10	143,048.07
Increase.	\$30,952.84	.....	\$761.39	\$29,945.46
Decrease.	.....	\$1,768.77	.....	.....
The proportion of earnings for each Road composing the line are as follows:				
Chicago, Burlington and Quincy....	\$7,061.97	\$42,913.87	\$3,090.83	\$142,066.67
G. & C. U. & I. C. R. R.'s	14,679.89	3,090.24	58.30	17,828.43
Peoria and Oquawka..	15,791.81	6,911.26	395.36	13,098.43
Total..	\$117,533.67	\$32,915.37	\$2,544.49	\$172,993.53



## Railroads.

### ALABAMA & FLORIDA R. R.—PRESIDENT'S REPORT.

The following extracts from the Report of the President of this road for 1857 will show its present condition and prospects :

"It was stated in the last Report that the contractors broke ground for grading on the 12th April, 1856, and that on the 26th July following they had graded, in continuity, ten miles of the road, and stretched their operations from the tenth to the seventeenth mile post, within which limits a great deal of work, in cutting down trees, grubbing, &c., had been done. The operations are now stretched to and are spread over the twenty-sixth mile, embracing what is estimated to be equal to twenty-four miles of continuous grading—whilst intermediate portions have been cleared of trees and grubbed of roots. The contractors are now finishing up that portion of the line upon which the heaviest work, both of masonry and excavation and embankment are to be found. The descent from the ridge dividing the waters of the Perdido from the Escambia river to the valley of the latter has been nearly accomplished. The line of road continues in this valley to some distance into the State of Alabama, affording great facilities for construction from the twenty-fifth mile up to the State line. The contractors found themselves in the clay hills and in the most difficult part of the excavations during the last winter, amidst floods of rain—still, the progress made has quite equalled their and our expectations. Indeed they are in advance of their contract stipulations; and, judging from the work done the last nine months, we are justified in saying that the entire grading, up to the Alabama State line, as well as all culverts and trestle bridgework, may be completed by the 1st July, 1858, and probably will be. Calculating that the last load of iron rails may be delivered at the company's wharf in the city by the 1st of September next, the entire track-laying may be completed at the same time the last shovel full of earth shall have been thrown up. Most of the box and arch culverts of stone have been completed, and several of them tested during heavy rains of winter, proving their solid construction, and their strength to resist any hydrostatic pressure to which they may be exposed. A large quantity of cross-ties has been prepared, and there are a sufficient number on hand to be laid down the moment we are ready to lay the rail upon them.

"The Board of Directors procured through the President, who visited Tallahassee for that and other objects, the passage of an Act of the Legislature of Florida accepting the donation of alternate sections of the public lands granted by Congress, by its Act, approved 17th May, 1856, the benefits of which

were to inure to your company. Under the requirements of the Commissioner of the General Land Office, a formal acceptance by the company has been filed in the Executive office at Tallahassee, and a copy under the seal of the State requested to be forwarded to the General Land Office at Washington. Other measures have been taken necessary in obtaining full title to these lands under the provisions of the Acts of Congress and of the State Legislature. Amongst these was the preparation of four supplemental maps of survey and location of the road, verified by the President and Resident Engineer, and sworn to by the Locating Engineer, exhibiting each day's progress in marking and fixing the line of road 'on the surface of the earth.' The object of this being stated by the Commissioner of the Land Office, who required it, to be the regulating, under the decision of the Attorney General of the United States, of the entries and pre-emptions made and proved prior to those daily locations. Happily, the line of road was marked and fixed up to the thirty-seventh mile from Pensacola prior to the 17th May, 1856; the whole line was located and marked on the 31st May, 1856; leaving but small interval of time or space in which entries or pre-emption proofs could be made prejudicial to the interests of the company.

"The President also procured an Act of the Legislature granting alternate sections of the swamp and overflowed lands to the company. The odd sections thus granted,\* lying within  
\* Since writing this Report it has been ascertained that the bill granting the alternate section of the swamp and overflowed lands failed to receive the Governor's signature; but it is supposed that the donation can still be made under the "Act to provide for and encourage a liberal System of Internal Improvements" in Florida. six miles on either side of the road, amount to 28,188 92-100 acres. Mr. H. Wells, who was formerly the agent of the State for selecting the swamp and overflowed lands granted by Congress to the State of Florida, was employed by the Board of Directors as selecting agent of the lands granted by the United States and State to your road.

"Very little opposition has been made to the right of way of the road through the lands of individuals. In almost every instance it has been freely given. In instances of condemned lands for the right of way, but little expense will be incurred beyond that involved in the legal proceedings required. These, and some cases of absent heirs or unknown owners of the lands, require and will receive the attention of the company's attorney at the next session of the Court; but no serious impediment, either in expense or otherwise, will thereby be presented to the progress of our operations.

"Progress has been made in negotiations for the supply of 3,760 tons of iron rails and fixtures. These might have been brought to a close before this time; but, as the lands donated by Congress have not yet been put

in possession of the company, for causes herein before mentioned, and as these lands and the proceeds of their sale are to form part of the securities for the credit obtained in the purchase of the rails, no final arrangement could be arrived at. The President is in communication with parties in New York and England for the purchase of all the rails required with the bonds of the company, secured by a first mortgage on the road and its equipments, and by a trust devoting the lands of the company and the proceeds of their sale to the payment of the principal and interest arising from said bonds. There is yet sufficient time to procure the rails and lay them down so as to arrive at the Alabama line with this part of the work by the time the grading, cross-tieing, and culverting of the road are completed.

"In the estimate, embraced in the Report of July 26, 1856, for the first year's earnings after the road had been carried seventy miles into the country, it was stated that at least 20,000,000 feet of lumber and 25,000 bales of cotton, besides a considerable quantity of tar, pitch and turpentine would be transported to Pensacola. Subsequent inquiry and observation lead to the opinion that the road, completed only to the State line, will bring down 10,000 bales of cotton, 25,000,000 feet of timber, besides tar, pitch, turpentine, passengers, &c., and carrying up supplies. The erection of scores of saw mills will be commenced at the first clang of the iron rails delivered in Pensacola.

"We may depend on lumber freight for every mile of road as soon as it is completed for the sawing and hewing of timber will keep constantly in advance of the progress of the road construction.

I calculate, therefore, 25,000,000 feet of lumber being transported over the road the first year, at \$1 25 per thousand feet.....	\$31,250
2d. Upon 10,000 bales of cotton from Conecuh, Covington, part of Pike, Butler and Monroe counties, at \$1 per bale.....	10,000
3d. Upon tar, pitch, turpentine, passengers, mail and return supplies.....	10,000
One year's earnings.....	\$51,250
Forty per cent. for expenses deducted.....	22,500
Net proceeds.....	\$28,750
Sales of company's lands during first year's operations of road, say 10,000 acres at \$1 25 per acre.....	12,500
	\$41,250
Applied—to pay interest on bonds of the company paid to contractors on completion of road, one year on \$134,000, at 7 per cent.....	\$10,780
To pay interest on bonds of the company paid for iron rails, fastenings, &c., \$250,000, at 7 per cent., 15 months.....	21,875
To pay interest on debt incurred for rolling machinery, \$36,000, one year at 7 per cent. per annum.....	2,520
Balance to credit of company.....	6,075
	\$41,250

"This estimate is made to show that all the financial obligations of the company, incurred for the first year's operations of the road completed up to the Alabama line, could be promptly met. The extension of the road, however, into Conecuh county, of which we have satisfactory assurance, will add greatly to the revenues of the road."



The financial condition of the road is as follows:

The amount of cash subscriptions is in..... 1181 shares.. \$118,100  
In bonds of the city of Pensacola..... 250,000

3581 shares.. \$368,100

Of this amount there have been retained in payment of salaries of officers of the company in stock. 59½ shares.. 5,950

2621½ shares.. \$362,150

By reason of death, removal and incompetency of some of the subscribers, we shall fail to collect of the cash subscription..... 26,000

\$336,150

We are promised subscriptions by the Pensacola Association to the amount of \$12,000, when we shall have expended \$36,000 in cash payments to contractors..... 12,000

Total am'ts available subscriptions..... \$348,150

The estimate submitted in the report of July 26, for the total cost of road, amounted to..... \$944,000  
We have reason to believe that this can be modified by reduction on cost of iron rails..... 37,600

And this is the am't assumed upon which are based this year's calculations of cost of road..... \$906,400

To meet this amount we shall have in available cash and bond subscriptions \$348,000

And in bonds of the company paid to contractors under their contract..... 154,000

502,000

\$404,400

The amount authorized by the stockholders of the Pensacola City Company to be subscribed to the stock of the railroad in bonds, secured by mortgage on their valuable possessions in the city of Pensacola, will probably be made available in the purchase of the outfits and fixtures required for the road..... 100,000

Leaving this sum to be provided for..... \$304,000

It is proposed to raise this amount by an issue of the bonds of the Alabama & Florida R. R. Co., bearing interest at the rate of 7 per cent. payable semi-annually; the bonds to be secured by first mortgage on the road and its equipments, valued when completed at..... \$906,000

By a trust deed of lands (150,000 acres) donated by the United States, assessed at a minimum value..... 187,500

By a trust deed of lands (23,188 acres) donated by the State of Florida..... 42,282

Amount of security on bonds..... \$1,135,782

And by a sinking fund formed out of a portion of the yearly earnings of the road. The principal and interest of which to be appropriated to the final payment of the bonds. \$8,000 thus applied each year, with interest at 6 per cent., regularly invested, would produce \$310,790 40, being a sufficient sum to extinguish the above debt of \$304,000.

"It should be remarked that the value of the company's lands are stated at the minimum. We prefer to do so, that we may avoid exaggeration in our estimates in any manner or degree.

Twelve installments on the capital stock, amounting to 60 per cent., have been called in, to be paid in cash..... \$ 60,600 00

And in the city bonds..... 150,000 00

\$210,600 00

Of this amount there have been collected in cash..... \$40,472 50

In city bonds..... 67,500 00

107,972 50

Leaving balance to be collected..... \$102,887 50

Of this amount, in cash..... \$40,472 50

In city bonds..... 82,500 00

\$102,887 50

"By an arrangement made with the contractors, the bonds of the city are issued every six months, on the 1st of January and 1st of July respectively, in payment of the installments due by the city.

The am't of installments collected is..... \$107,972 50

Balance in hands of Treasurer April 30, '55..... 701 95

\$108,674 50

The total of expenditures is..... 108,025 86

Balance in hands of Treasurer..... \$648 69

There have been paid to contractors, on acc't of contract, in cash..... \$39,900 00  
In bonds..... 67,500 00  
To Engineer of the company..... 100 00  
For contingencies..... 525 88

Total expenditures, as above..... \$108,025 88

### PENNSYLVANIA MAIN LINE.

The following petition was filed before the Prothonotary of the Supreme Court:

PITTSBURGH, June 12, 1857.

Henry S. Mott as well for himself as for each other stockholders of the Pennsylvania Railroad Company, as may choose to become parties, vs. Pennsylvania Railroad Company, et. als.

In the Supreme Court, Middle District in equity.

The petition of Samuel B. Cooper, Jacob Tomar and Wm. Perkins, Commissioners of Allegheny County in the Commonwealth of Pa., acting for and in behalf of said county of Allegheny, represents that the said county is owner of 20,000 shares of the Capital Stock of the P. R. R. Company, and have owned and held the same for nine years last past. That a bill has been filed in the honorable court in the above case, setting forth that the said Company threatens and intends to become the purchaser of the Main Line of the Public Works, of the State, according to the terms and provisions of an act of Assembly of May 16, 1857, referred to in the said bill and praying for the causes and reasons therein assigned, that the said Company, their officers, servants and agents, and the other defendants named in the said bill may be enjoined by the decree of your honors from purchasing the same.

Your petitioners therefore pray that your honors will permit them to become parties, complainants to the said cause, and aid and assist in prosecuting the same, according to the practice of equity in such cases—and they will ever pray.

(Signed),

S. B. COOPER.

JACOB TOMAR.

WM. PERKINS.

Commissioners of Allegheny County, Pa.  
On the 12th day of June, 1857, personally appeared before the undersigned authority, S. B. Cooper, Jacob Tomar and Wm. Perkins, the above named Commissioners of Allegheny county, who, being duly sworn, say that the facts set forth in the above petition are just and true to the best of their knowledge and belief.

S. B. COOPER.

JACOB TOMAR.

WM. PERKINS.

Sworn and subscribed before me the day and year aforesaid. A. B. McCALMONT,  
Prothonotary Supreme Court, Western District.

EXPORT FROM THE PORT OF PENSACOLA IN MAY, 1857.—The following statement from the books of the Custom House exhibits the export from Pensacola during the last month of May, compared with the export in May last year, by which it appears that the export of lumber, &c., is still on the increase:

Lumber to New Orleans.....	feet. 1,375,221
" Galveston.....	" 373,089
" Boston.....	" 227,040
" Port La Vaca.....	" 273,164
" Key West.....	" 95,000
" Baltimore.....	" 201,153
" Powder Horn.....	" 166,000
" Cork, G. E.....	" 481,454

Total.....feet. 3,192,121

Exported in May last year..... 2,670,149

Increase in May this year..... 521,972

Also, 22½ Sticks Timber to New York.

Sash Doors to New Orleans.....	cb. ft. 3,032
" Port La Vaca.....	" 46
" Powder Horn.....	" 46

Total..... 3,330

No export in May last year.

Laths to New Orleans.....	No. 296,400
" Galveston.....	" 55,000
" Port La Vaca.....	" 60,000

Total..... 411,400

Exported in May last year..... 287,000

Increase in May this year..... 114,400

Shingles to Galveston.....	No. 20,000
Exported in May last year.....	" 24,000

Decrease in May this year..... 4,000

Bricks to Tortugas.....	No. 275,000
Exported in May last year.....	" 25,000

Increase in May this year..... 170,000

Cotton to New Orleans.....	bales. 25
" New York.....	" 21
" Boston.....	" 5

Total..... 51

Exported in May last year..... 231

Decrease in May this year..... 180

Cow Hides to New York.....	No. 289
" Boston.....	" 130

Total..... 419

Exported in May last year..... 435

Increase in May this year..... 64

Deer Skins to New York.....	bales. 30
" Boston.....	" 5

Total..... 35

And 600 bris. Lime and 21 boxes Tobacco to New Orleans, and 1 box Furs and 1 box Wax to New York.

### RAILROAD LOAN.

COUNCIL BLUFFS, June 6th, 1857.

To E. Lowe, L. W. Babbitt, J. B. Stutsman, P. J. McMahon and others:

GENTLEMEN:—As requested by you, I will state the proposition of our Company in relation to the Loan to the Mississippi and Missouri Railroad Company, which is to be voted upon on Saturday the 13th inst.

We ask Pottawattamie County to subscribe to the Capital stock of the Mississippi and Missouri Railroad Company, \$300,000, for the payment of which, the County issues County bonds for \$300,000 payable in twenty years from the time they are issued, and bearing interest not to exceed ten per cent per annum. The Bonds to be delivered to the Company, when the road is building to the east line of and through Pottawattamie County, and the proceeds of the Bonds to be expended in the county. The interest accruing on the Bonds, after the are issued, and while the Road is building through the county, and until it is finished and running into Council Bluffs, will be returned to the County in Stock. For instance—the Bonds will be called for, about one year before the road is finished, and about three years from this time; the interest, at 10 per cent. for that year, will amount to \$30,000, which the Company will issue their Stock to the County for, as well as the \$300,000 for the Bonds, making the County a Stockholder to the amount of \$330,000, on which, it will receive dividends from the earnings of the Road, from the time it is finished, of from ten to fifteen per cent. while the County will only pay interest on \$300,000 Bonds, at not exceeding ten per cent. per annum—a clear gain to the County of at least \$3,000 per annum.

Scott, Johnson and Muscatine counties, issued Bonds to our Road, and since the first Division of the Road was completed, and turned over by the contractors to the Company, the dividends on fifty-five miles of road has more than paid the interest on their Bonds; so that those counties are to-day reaping the benefit of the Road, without pay-



ing one cent in the way of tax to provide for the interest on their Bonds.

A favorable response by this County, to the proposition, will bring the road into Council Bluffs from three to four years sooner than it otherwise would come.

I am very Respectfully,

Your ob't Serv't,

G. M. DODGE,  
Assistant Engineer M. & M. R. R.

#### MR. BANCROFT ON THE GREAT R. R. LINE.

Mr. Bancroft the historian made the following remarks on the great American Central Railroad Line, at the Dinner at the Burnet House in Cincinnati.

Ladies and gentlemen:—We have most of us been employing the day in surveying the environs of Cincinnati, where the richness of the soil and the beautiful undulations of the country, as it rises above the rivers, quicken and encourage the genuine love of nature, and the unvarying richness of the soil generously rewards the care which it receives. We have found that the buckeye leal is the fit emblem of its people, for it is the semblance of the open hand, ready to give to those who need—to grasp the hand of a friend—to welcome the stranger to hospitality. The great West itself, uncontrolled by precedent in the daring of its enterprise, and unequalled in the greatness of its achievements, is yet the child of the past. Freedom of industry and freedom of mind were the great ideas of the eighteenth century. Here you behold their fruits.

Our course to this city has been by the way of the thrice admirable Baltimore and Ohio Railroad. The scenery through which it makes its way has a character of grandeur of its own, and in the wonderful varieties of forest and lawn, of river and mountain, of nature in her savage wildness and nature in her loveliest forms, presents a series of pictures which no well educated American should willingly leave unvisited. We cross the Atlantic in quest of attractive scenes; and lo! we have at home, alongside of the great central iron pathway, views that excel anything that can be seen among the mountains of Scotland, or in the passes of the Appenines.

Then the enterprise which achieved this great result is so admirable as to excite our wonder that what seemed impossible has been finished. This great work is emphatically the work of the city of Baltimore, and it may almost be said of Baltimore alone, for it was carried on without much favor from its own State, and sometimes in conflict with the rivalry of its neighbors. Nor is this all the marvel. The work in its completeness has cost more than \$31,000,000, and was entered upon with a brave heart, and at a time when the entire valuation of the real and personal property of Baltimore was less than \$27,000,000. But Baltimore was always brave. In the gloomiest hour of the American Revolution her voice of patriotism was loud and clear—her conduct an example to her sister cities; and when has she ever been wanting to the cause of civil and religious freedom.

Once more we return to her railroad, and say it is unequalled in the difficulties which it has surmounted. When we came to the foot of the Alleghanies on the east, we all saw the steepness of the dividing ridge that seemed impassable. But a railroad is a work of art.—Michael Angelo used to say that all the forms of beauty lie hidden beneath the surface of

the marble quarry, waiting only for the hand of the sculptor to call them into being. The eye of Latrobé saw at a glance the capacity of the mountain, and, scoffing at the threatening ravine, and precipices and lofty summit, gave himself no rest till commerce had carried its safe and easy pathway in triumph over the mountain top, and proved to the world that there are no difficulties which true enterprise cannot surmount—that nature herself is in league with genius.

And all this has been achieved by the city of Baltimore, while she is still in the freshness and intrepid vigor of youth. What must be her future, when such is her beginning! She is called the monumental city.—Her column rises as a memorial of the Father of his Country; but this is her own monument. It spans the Alleghanies; it reaches from the waters of the Atlantic to the bosom of the Ohio; it commands the admiration of the world.

To-morrow and the day after, we extend our course to the further West, we celebrate the opening of the direct communication between Baltimore, Cincinnati and St. Louis. The occasion is one of national interest. The system of roads binds indissolubly the East and the West. The triad of cities which are the fortresses of the Union—the breakwaters against which the angry waves of sedition shall dash only to be driven back—are now but as one in commerce, iron culture, in the arts of life and the enjoyment of society, in enterprise and love of country.

How would Madison—who loved the Union with such singleness of affection that after death the word might have been found imprinted on his heart—how would Madison have been gladdened could he have lived to see these days! And Washington—who, when he last came to the West, crossed the mountain by fatigue marches, bivouacking in the wilderness, and then slowly paddling his way on the Ohio—how would he have exulted could he but have seen his great and cherished idea of an international highway carried out with a perfection and convenience which surpassed the power of his century to imagine! Here Young America is fulfilling that destiny which her fathers manifestly designed for her; she more and more subdues nature and gives freedom to men. Under her influence the world will be united in peace and commerce, and liberty be owned as the birthright of every nation of the earth.

#### CHICAGO, ST PAUL AND FOND DU LAC R. R. GRANT MORTGAGE BONDS.

Lists were opened yesterday in New York at the office of the Chicago, St. Paul and Fond du Lac Railroad Company, for the purpose of receiving subscriptions to their recent issue of construction bonds, secured by a mortgage upon the whole route of road, from Chicago to Lake Superior, and also upon the lands granted them by government to aid in the construction of their road from Fond du Lac to Marquette and Ontonagon. These are eight per cent. bonds, running twenty-five years from May 1st, 1857, and the present issue is offered to subscribers at 80 per cent. at par. The bonds carry with them a special stock privilege, allowing subscribers to the bonds to subscribe to the special Land Grant Stock of the Company (10 shares of stock to each bond), at any time within two years from June 1st, 1857. Payment is to be made at the time of subscribing at 10 per cent. of the par value, and the stock is to be exempt

from any further assessments, and to be credited with proceeds of sales of land until full paid. This privilege is transferable with the bonds, and must add greatly to their value,—since none of our railroads is more certain to afford large returns to its stockholders than the Chicago, St. Paul and Fond du Lac. These bonds, being so abundantly secured offer a desirable opportunity for investment, and will undoubtedly find many purchasers among the friends of the road at the West.

The land grant, which forms a part of the security of these bonds, comprises some 1,200,000 acres, being six sections per mile, along a route of more than 300 miles in length, extending from Fond du Lac, by way Oshkosh and Appleton, to Lake Superior, at Marquette and Ontonagon, and covers some of the most valuable beds of iron and copper to be found in those regions. Quarries of marble and slate are also found, and a large portion of the route lies through fine timber lands. Even the most remote of these lands will become very valuable on the completion of the road, and in all probability the stockholders will be more than remunerated from the sale of lands, for their entire outlay in construction.

Mr. Wheeler, the Vice-President of the Company, has recently returned from New York and reports matters there as progressing favorably. He will remain at the West to attend to important interests in connection with the land grants, and to secure the completion of the road at an early day. The Company have some seventy-five miles of road now in course of construction.

[From the American Railway Times.]

#### THE SOUTHERN RAILWAY MOVEMENT.

A student of physical geography, viewing the Atlantic slope of North America simply in reference to the natural sources of wealth which go to exite and reward human industry and build up great cities, might have some difficulty in preferring New-York to Norfolk, as the dominant commercial centre. Norfolk had the advantage of more natural inland navigation and a milder climate, besides being more conveniently central to the two zones, grain-growing and cotton-growing, which compose the region between the northern Lakes and southern Gulf. It is the point where cotton and corn come together. We have never been able to discover any physical cause why the harbor formed by Elizabeth River should not have attracted commerce as well as the less accessible harbor of New-York. True, its shores are low. So are those of Zuyder Zee. Any social or political reasons that have made New-York a greater city than Amsterdam and kept Norfolk a village lie out of our province. The fact stands visible, that while New-York concentrates a population of more than half a million with a commercial energy greater in proportion to its population than any other mart in the world, the harbor which the United States Government has selected as the central nest of its navy looks on a population of hardly more than 30,000 round about it.

There has been a great deal of talk in the Southern States about changing all this, but never any action worth mentioning. Whether it ever will be or can be changed, comes within our scope only as a question connected with railways, in which shape it is just now presented.

A convention of railway men, assembled at Bristol, Tenn., on the 3d inst.—considerably



extensive, as will be seen below—with great unanimity devised the first practical measure that we remember to create a direct trade between the South and foreign countries. It was nothing less than to make an arrangement with the proprietors of the Great Eastern steamer, soon to be launched at London, to send her to Norfolk instead of Portland. As it is said there are only two harbors on our whole coast into which so large a vessel can safely enter, and that of Norfolk is one of them, the difficulty of the southern enterprise reduces itself to that of outbidding Portland in freight and passengers as a customer for the mammoth ship. The Southern gentlemen seem to have no manner of doubt that they shall be able to do this, and even go so far beyond it as to boast of freight enough, to be delivered by railway at Norfolk as soon as the Norfolk & Peterboro' Railway is completed, to fill seven lines composed of four such *leviathan* ships each! It is very true that when the Norfolk & Peterboro' Railway is completed, Elizabeth River will be in railway communication with the Mississippi and with the most distant corners of the cotton-growing region; but we do not see as it follows that cotton will cross the Alleghenies by rail from the banks of the Mississippi or the broad plains of the seaboard from Georgia and South Carolina. The tobacco of Virginia may be shipped, and some passengers. The *leviathan* ship, too large to be got into New York, seems to us, for that very reason, destined to prove a failure, so far as American trade is concerned. It may do better for the Australian trade, which is a peculiar institution of the British nation. We are afraid its advent, if that could be secured for Virginia, would not be the birth of a new commercial era for the Old Dominion; nevertheless, it is quite refreshing to see how zealously the idea has been seized of consolidating, so to speak, the Southern railways with the *Leviathan Steam Line*, and so leaving out New York, whether a great Southern city be the result or not. We do not know when we ever saw full grown men so much elated with an idea, and in such an extatic hurry to realize it, as the Convention at Bristol were with this.

The interests represented in the Convention were as follows:

*Norfolk & Petersburg Railway*—Hon. Francis Mallory, President; John E. Doyle, N. C. King, F. F. Ferguson, Mayor of Norfolk; Jas. F. Leigh, R. A. Worrell, J. J. Biggs, J. Miller Southgate, R. G. Broughton, Conway Whittle.

*South Side Railway*—Thomas H. Campbell, President; Thomas Branch, T. H. Archer, Charles Corling, S. S. Griscom, L. Lunsford, W. H. Crow, B. F. Childrey, L. C. Tappey, E. O. Hinton, A. S. Shafer, A. A. Allen, E. H. Stainback.

*Virginia Central Railway*—C. Fontaine, President; Sam'l Carpenter.

*Virginia & Tennessee Railway*—John R. McDaniel, President; Thomas F. Preston, John M. Preston, Hon. Wm. Ballard Preston, Hon. A. A. Edmondson.

*Orange & Alexandria Railway*—John S. Barbour, President; Inman Horner, John Willis, H. W. Vandergrift, B. J. Lathrop, B. B. Marye, Erasmus Taylor.

*Alexandria, Loudon & Hampshire Railway*—Andrew Jamison, John McKenzie.

*Manassas Gap Railway*—Gilbert S. Meem. *Cincinnati, Cumberland Gap & Charleston Railway*—R. L. Owen, G. W. Barnett.

*Virginia & Kentucky Railway*—Thomas L. Preston, A. H. Dorr.

*Eastern Tennessee & Virginia Railway*—Samuel Rhea.

*Northeastern & Southwestern Alabama Railway*—F. B. Deane, Jr.

*Union Steamship Company, Philadelphia*—Thomas Webster, Jr.

*Lynchburg & Abingdon Telegraph Company*—Dr. W. S. Morris.

*Bristol Delegation*—A. K. Moore, S. E. Goodson, L. F. Johnson, A. T. Wilson, J. W. Thomas, J. W. Morgan, J. R. Anderson, J. G. King, Jas. King, Jr., V. Reeber, Dr. Pepper, E. C. Stufel, Wm. Wiloughby, H. M. Leadbetter, W. L. Rice, Dr. J. R. Phillips, Wm. L. Martin, W. T. Carmack, Wm. F. Moore, Jas. T. Preston, G. L. Wesley, C. Gallaher, W. J. Tamplin, H. G. Shell, Jas. Fields, Jos. Pepper, W. N. Perkins, J. W. Deaderick, Jas. King, Sen., J. M. Robinson, W. G. Peck, J. H. Everett.

The Hon. Francis Mallory, of Norfolk, President of the Norfolk & Petersburg Railway, presided. The Secretaries were Messrs. A. K. Moore, of the *Bristol News*, Chas. W. Britton, proprietor of the *Lynchburg Virginian*, and R. G. Broughton, of the *Norfolk Herald*.

The following gentlemen were the business committee: Messrs. F. B. Deane, C. Fontaine, President Virginia Central Railroad; S. H. Campbell, President South Side Railroad; John S. Barbour, President Orange & Alexandria Railroad; John R. McDaniel, President Virginia & Tennessee Railroad; Samuel Rhea, Hon. W. B. Preston, Gilbert S. Meem, A. Jamison, L. H. Myers, Norfolk; Thos. L. Preston.

The chairman of this committee reported a series of resolutions, and urged their passage in an enthusiastic speech, which carried all before it. Omitting those resolutions which merely announce the commercial theory common in that latitude, we copy all that have a practical bearing:

*Resolved*, That the works of internal improvement now in progress will derive great benefits and facilities in their construction and rapid completion from the establishment of the proposed line of steamships, which will add incalculably to the productions and trade already requiring direct lines of communication with foreign markets.

*Resolved*, That, in view of the objects above indicated, a commission be appointed to visit Europe for the purpose of disseminating correct information in that country as to the financial and industrial condition and resources of Virginia, and also to place prominently before the commercial men abroad the advantages which must follow a direct trade between them and us on the completion of that extended system of improvements now so nearly accomplished, and which, when consummated, will connect our seaports with the great producing and consuming country stretching from the Chesapeake and beyond the Ohio and Mississippi rivers, by the shortest and cheapest line of intercommunication between the East and the West.

*Resolved*, That our commissioner be directed more especially to confer with parties abroad in reference to the speedy establishment of a suitable line or lines of steamers between the waters of Virginia and Europe; and that he be also requested to place himself in correspondence with the managers and proprietors of the Great Eastern Steamship Company, and report to the President of this Convention whether or not the vessels of that company are likely to promote the objects of this Convention.

*Resolved*, That the commissioner be authorized to say on our behalf that we are not merely sensible of the importance of this trade, but that we are unalterably determined to establish and maintain it on a permanent basis, and he can assure those disposed to connect with us, that such an enterprise will receive that support from the people of Virginia, and the other States here represented, which its importance, commercially and politically, so imperatively demand.

*Resolved*, That the expenses attending this commissioner should be borne by the railroad companies of the States who feel interested in the subject, in proportion to the length of their several lines; and that those who feel authorized to do so, now pledge themselves to that effect on behalf of their several companies; and that others, differently situated, be requested to take immediate action to that end.

*Resolved*, That we invite the co-operation of such portions of our country, and such other lines of improvement, together with the commercial communities in our State who may have a common interest with us in establishing a line or lines of ocean steamers.

Hon. William B. Preston was unanimously appointed the commissioner under these resolutions. He accepted the appointment, and returned thanks for the honor. The *New York Herald's* report says:

Mr. Whittle, of Norfolk, suggested the propriety of inviting Tennessee and Kentucky to co-operate in this enterprise. His suggestion was made in conformity with the expressed wish of Mr. Preston, that he would have the aid of others in his mission.

Mr. Mallory—(Mr. Campbell occupying the chair)—I prefer that the matter should stand as it is. No doubt my friend (Mr. Preston) may find great assistance in the councils and the information which commercial men might give to him on his mission abroad. Our commercial men, I have no doubt, will take the necessary steps to associate with him some representative on their part. They can do so with great propriety without suggesting it to them. As to Kentucky and Tennessee, I should gladly receive their co-operation and assistance. It has been often invited in former conventions; but the invitations addressed to the citizens of those States has failed to result in anything. I prefer that a Virginian should appear upon English or French soil as the representative of the empire of Virginia, for such I may call her. I think the gentleman chosen fully competent for the mission; and, for my part, I am content that he should go there without any other aid. If co-operation is needed, let us go there with some one who can place the credit, the resources, the character and the importance, and everything connected with Virginia, in its true light. I say, then, let the commissioner be the commissioner of Virginia, and let us go forward in our strength and might and work out the problem.

Mr. Whittle—My suggestion was offered merely in conformity with the expressed desire of the gentleman chosen to represent us. I, of course, give way cheerfully.

We cordially assure our Southern railway friends, that notwithstanding the lack of faith we have expressed, we wish them all success in this undertaking. It will but hasten the day when, as the result of their heroic labors of civilization, more than of all other causes, our country will be one homogeneous and harmonious whole. The good day is certainly coming.



Amount of Loan.	Rate of Int'r.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Ln'n of Road	Capital	Total Funded Debt.	Gross Earnings.	Net Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon & Hmp'sr	.....	173	6,000,000.00				
493,200	7	July & Jan.		1862-3	2d "	.....	Androsco'g'n & Kennebec	.....	54.55	1,400,000.00		209,475.46	110,246.98	none.
199,000	7				Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	199,000.00	272,123.74	173,780.74	4 pr. ct. 6m
52,616	6			now	"	.....	B'n'r, Old T. & Milford...	.....	12.5	135,000.00	52,646.25	39,104.40	8,671.61	15,000 in '53
500,000	7		N. Y.	1860	"	.....	Boston & Worcester...	.....	44 5/8	4,500,000.00	500,000.00	1,102,761.90	437,062.03	180,000 4.6m
500,000	7			1857-9-62	1st mortgage.	.....	Buffalo & State Line...	.....		1,300,000.00				5 pr. ct. 6m.
300,000	7			1864	Income.	.....	" " "	.....						
200,000	7			1872	Domestic.	.....	" " "	.....						
577,187	6			1874	4th mortgage.	30.	Central Ohio...	.....	43	1,872,800.00	1,001,087.00	164,260.00	77,700.00	10 per ct.
192,200	7			1874	2d "	.....	Champlin & St. Lawrence	.....						
380,000	7				Domestic.	.....	Ch'r'l'te & South Carolina.	.....	110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,360
1,140,000	7			1864-7	1st mortgage.	.....	Ch'go, Burl'gh'n & Quincy.	.....	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,300,000	6-7-8		N. Y.	1863-9	2d "	.....	" " "	.....						
374,000	8			1868-76	Convertible.	.....	" " "	.....						
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa.	.....	5.					
532,000					2d "	.....	Cin. Wil'ng'n & Zanesville	.....	13 1/2	1,761,149.16	2,241,500.00	221,491.96		
104,000					3d "	.....	" " "	.....	25.					
305,500					Income.	.....	" " "	.....						
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	103 1/2	139	4,741,220.00		1 3,754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning...	.....	85	1,500,000.00				
400,000	7			1881	2d "	.....	" " "	.....						
0,000 00	7			1873		.....	Cumberland Valley...	.....	52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00			
550,000	7					.....	Eastern Railroad...	.....	336-10	3,245,300.00		665,578.79	288,077.84	\$234,133
740,000	7					.....	East Ten. & Virginia...	.....	130	625,450.00		30,897.30	19,692.30	
88,000	10			1869	1st mortgage.	.....	Essex Railroad...	.....	20	700,000.00				
400,000	7			1861	1st "	.....	Evansville & Crawf'd'vle	.....	109	2,228,657.00		243,970.42	136,061.90	\$133,281.45
200,000	10			1864	2d "	.....	The Fitchburg (Mass.) R.R.	.....		3,540,000.00		681,162.52	213,837.51	3 per cent.
					1st mortgage.	.....	Fox River Valley...	.....	33	800,000.00				
100,000	6					.....	Fair Haven Branch...	.....	15	300,000.00		50,381.23	14,892.45	\$166,240.00
100,000	6				1st mortgage.	.....	Georgia, RR & Banking Co.	.....	233	4,156,000.00		1,068,202.54	357,689.42	\$166,240.00
300,000	7				1st "	.....	Grt Falls & Conway d. R.	.....	50			27,576.69	14,207.07	
4,000,000	6 1-9													



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

June 5th, 1857.		
Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1855, ..	"	"
Cin. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	"	64
Erie, 3d Mortgage, 1853, ..	"	66
" Sinking Fund, ..	"	83
" conv. 1862, ..	"	81
Grand Trunk (Canada) Debenture, ..	"	70
Great Western " conv., ..	"	72
" " non-conv., ..	"	91
Illinois Central, 1st Mort., 7's, ..	"	110
" " with option 70 per cent., ..	"	106
shares till Jan. 1858, ..	"	90
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	"	107
Little Miami 1st Mort. not conv. 6's, ..	"	86
Marietta and Cincinnati, 1st Mort., ..	"	88
Michigan Central, conv. 8's, 1860, ..	"	90
" do do 1869, ..	"	91
N. York Central. No Mort. Not conv. 6's, ..	"	90
" conv., 7's, ..	"	89
Ohio and Mississippi, 1st Mort., ..	"	79
Ohio and Pennsylvania, Income 1872, ..	"	91
Panama. No mort. conv. 1866, ..	"	68
Pennsylvania, 1st Mort., conv., ..	"	70
" Sterling, 2d Mort., ..	"	89
Stenbenville and Ind., 2d Mort., ..	"	90
" " ..	"	91
" " ..	"	93

The quotations given are sterling quotations. The American value is to be obtained by adding an exchange generally about 10 per cent.

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD.

## MERCHANTS' EXCHANGE

AND AT PRIVATE SALE.  
BY HEWSON & HOLMES.

For the week ending June 24, 1857.

## BONDS.

\$5,000 Covington & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds, ..	66	and int
3,000 Little Miami R. R. Co. 6 per cent. 1st Mort. age Bonds, ..	80	
1,000 Huron county, Ohio, 7 per cent. Bond, ..	80	
1,000 Cin., Ham. & Dayton R. R. Co. 7 per cent. 1st mort. Bonds, ..	89	"
4,000 Indianapolis & Cincinnati R. R. Co. 7 per cent. 2d Mort. Bonds, ..	80	
1,500 Cov. & Lex. R. R. Co. 6 per cent. Income Bonds, ..	50	
7,000 Cin., Wil. & Zanesville R. R. Co. 7 per cent. 2d mort. Bonds, ..	25	
1,000 Ohio & Mississippi R. R. Co. 7 per cent. 2d Mort. Bonds, ..	53	
1,000 Cincinnati & Whitewater Canal Bonds, including 11 years' int., ..	10	
960 Little Miami R. R. Scrip., ..	81	1/2
290 do do, ..	82	

## STOCKS.

153 Shares Little Miami, ..	90	
60 " do do, ..	90	1/2
20 " do do, ..	90	1/2
35 " Cin., Ham. & Day, ..	68	
200 " Hillshoro' & Cin., ..	18	1/2 and int.
66 " Cov. & Lexington, ..	18	
50 " Columbus & Xenia, ..	89	
12 " do do, ..	90	
80 " Indianapolis and Cin., ..	61	
20 " do do, ..	61	1/2
400 " Cin. & Chicago 60ds., ..	3	"
106 " Junction (Ind.), ..	8	"
8 " Farmers' Bank Ky., ..	122	1/2

## MONETARY AND COMMERCIAL.

As we approach the first of July—one of the great settling days of the year—the lines are drawn tighter, and we notice a less favorable condition of the discount markets than at our last dates. The demand is becoming more active, and the supply is not more abundant. Good paper is, however, done by the regular houses for their customers at regular rates, say 10 to 12 per cent. Outside rates range from 15 to 24 per cent.

Eastern exchange, which has stood at 1/2 buying to 3/4 selling for some time, has a slight upward tendency, and we quote it to-day at 3/4 to 1/2 premium buying, and 1/2 selling. New Orleans is dull at 1/2 to 3/4 discount to par.

In general business the markets are dull. There are no great movements going on. A class seems to be waiting the result of the fall crops, which now promise well. Building is going on actively in Cincinnati at the present time. There never was more or finer buildings in process of construction in this city than there is during the present season.

In New York we notice a greater stringency in the money markets than before observed. Money is in better demand and capital pretty fully occupied. The weekly footing up of the banks shows a better state than was anticipated. The specie on hand was larger. Stocks had not recovered from the combined and systematic attacks of the bear party, although the feeling at the Boards was somewhat better.

The Michigan Central Railroad Company has declared a dividend of 5 per cent. on its last six months' business.

The Terre Haute & Richmond Railroad Company has declared a dividend of 5 per cent. on its last half year's business.

We subjoin our usual quotations from Hewson & Holmes:

The opening of the stock market early in the week was characterized by the same languid feeling manifested at the close of our last report; this, however, gave place to greater animation and a firmer feeling as the week advanced, and we have to-day to report a more active demand for all first class securities, with an increasing confidence on the part of holders, without, however, any material change in prices. Indianapolis & Cincinnati shares are again looking up, with an improvement of 1 to 1 1/2 per cent. from last week's rates. All other stocks remain at about our last quotations.

In Bonds a fair amount of business has been done, with an easier market for Covington & Lexington 7s, and an advance in Cin., Hamilton & Dayton 1st mortgages.

The unseasonable cold weather which has continued during the week has excited some fears as to its effect upon the growing crops; but all the reports which reach us prove this fear to be groundless, and unless we have a continuance of cold weather, with heavy rains, the amount produced by our agriculturists this year will be without a precedent.

The money market is working somewhat easier, owing more to the want of demand than to any increase in the supply of currency.

Exchange on New York is without change, 1/2 to 3/4 being the current rates.

## SALES AT THE NEW YORK STOCK BOARD—JUNE 22.

\$5,000 Virginia O's, ..	92	1/2
3,000 Erie R. C. Bonds, 7's, ..	70	
1,000 Hudson Riv. 2d Mortgage Bonds, ..	81	
2,000 Hudson Riv. R. R. 3d Mortgage Bonds, ..	53	
1,000 Hudson River Con. Bonds, ..	55	1/2
6,000 Galena & Chicago 2d mort. Bonds, ..	76	1/2
7,000 Illinois Central R. R. Bonds, ..	93	
300 shares New York Central, ..	81	1/2
200 " Cleveland & Toledo, ..	56	1/2
25 " Milwaukee & Miss., ..	62	1/2
766 " Erie, ..	30	1/2
545 " Harlem R. R. stock, ..	9	
50 " Hudson River, ..	21	
500 " Reading, ..	71	
600 " Cleveland & Pittsburgh, ..	40	
558 " Mich. S. & N. Ind., ..	42	1/2
24 " do do p. stock, ..	40	
100 " Panama, ..	92	
450 " Illinois Central, ..	124	
250 " Galena & Chicago, ..	88	
62 " LaCrosse & Milwaukee, ..	57	1/2

ILLINOIS CENTRAL R. R.—The receipts of the Illinois Central Road were:

May, 1857, ..	\$213,459 65
May, 1856, ..	215,000 00

Decrease, .. \$1,540 35

GALENA & CHICAGO UNION R. R.—The earnings of the Galena & Chicago Railroad were:

May, 1857, ..	\$234,281
May, 1856, ..	232,067

Increase, .. \$2,214

## NORMAN HOUSE AND PARK.

The enterprise proposed in the pamphlet of this title has been favorably received by the people and the press.

[From the Daily Commercial of the 30th ult.]

"NORMAN HOUSE AND PARK."—We have received a neat pamphlet with this title, containing a "Statement of the Plans and Prospects of the Norman Company," with a beautiful colored "chromolithograph" of "Norman House and Park," as it is to be, if the author of the pamphlet 'J. T. Crapsey, Esq.' is successful in his project, the points of which may be briefly set forth. He happily sketches the *key note* in the first sentence thus: "It has been suggested that there ought to be a *first class hotel* near the city, but beyond the influence of the city atmosphere." As for a park, why not have a park with a hotel in it? The proposed location is four miles north of the city, one mile north-westward from Cumminsville, and about half a mile southwest from the Farmers' College. The Mount Pleasant Turnpike Road is half a mile east of the park—the Colerain road eighty poles west. Springs abound in the ravines, and the site selected for the hotel is shady and picturesque. It is estimated that \$150,000 is all the capital required. In the estimate, "contingencies" are set down at \$2,000. The contingencies in such enterprises are usually the largest items. Taking it all in all, the scheme is well worth looking into by capitalists.

[From the Daily Times of the 12th inst.]

NORMAN HOUSE AND PARK.—We understand that a stock company is about being formed in this city, having a capital of \$150,000, to be held in shares of \$25 each, with the design of building an extensive hotel with an adjacent park, in the vicinity of Cincinnati. The location selected is one mile northwest of Cumminsville and half a mile southwest of College Hill. It contains eighty acres, well adapted to the purpose, and will allow of a fine vineyard, orchard, gardens, promenade grounds, &c., while the innumerable springs will furnish sufficient water for an artificial lake. The house is to be 160 feet front by 180 feet deep, to be built of stone, finished in a modern style, and cost \$80,000.

We have long needed an establishment of this kind in the vicinity of Cincinnati, and believe, when completed, it would be well patronized. The distance from the city is only four miles, and the grounds can be reached by an almost level road. Persons desiring to make inquiry as to this enterprise can be furnished with the particulars by calling at the office of the Norman Company, Northwest corner of Sixth and Walnut streets.

[From the Central Christian Herald of the 18th inst.]

THE NORMAN HOUSE AND PARK.—A very neat pamphlet bearing this title, has been laid on our table. The idea advanced in it is that there should be near Cincinnati a first class hotel, with grounds around it, for summer boarding, pleasure parties, etc. The writer shows that the investments in such an enterprise would be safe and remunerative, indicates the proper location for the house and park, estimates their cost, and proposes that a joint stock company be formed.

The suggestion seems to us a 'good one, and worthy of attention.

The *Journal and Messenger* of the 19th inst. takes substantially the same view.



## NEW, ALBANY &amp; SALEM R. R.

*Report of the Committee appointed by the City Council to examine the books of the New Albany & Sandusky City Junction Railroad Company.*

MR. PRESIDENT:—The select committee appointed, under a resolution of your honorable body, to examine the books of the New Albany & Sandusky City Junction Railroad Co., would respectfully report that they have examined the same, and submit the following answers to the questions propounded in the aforesaid resolutions:

1st. How much stock in cash and work has been subscribed, and by whom?

Ans. \$839,506 72.

Of this amount \$49,917 72 is scrip stock.

In addition to this amount we find stock subscribed on the subscription papers by various parties to the amount of \$133,250. Seventy-two thousand dollars of this amount has been transferred to the city, but not charged to her on the books of the company.

The total amount, therefore, will be \$972,756 72.

2d. How much real estate has been subscribed?

Ans. \$283,751 66.

3d. How many City Bonds have been disposed of, and how many pledged for debt?

Ans. The books of the company do not show that any have been sold.

They are in the People's Bank, New York.....\$25,000  
In the hands of W. S. Pearson..... 5,000  
" " J. P. Yelverton..... 20,000  
" " P. Latimer..... 50,000

Your committee found a receipt on file acknowledging the possession of \$93,000 bonds, held subject to the order of James Montgomery.

The Ohio Insurance Company holds \$60,000 of the city bonds as collateral security for \$38,488 80, and \$40,000 of the city bonds have been deposited in the Ohio Insurance Office as collateral security for endorsements made for the benefit of the company—making the whole amount of bonds \$200,000. In addition to this, the railroad company, to secure the endorsement above mentioned, have placed \$43,000 of real estate bonds at the Ohio Insurance Office to secure \$18,183, and given the Ohio Insurance Co. a mortgage on all the unincumbered real estate of the company.

The amount of real estate bonds actually sold is \$67,000.

4th. All other liabilities of the company, and to whom are the debts due?

Together with the above, the following is the indebtedness of the company:

Real estate stock.....\$283,751 66  
Bills payable..... 56,671 89  
Second mortgage bonds..... 57,000 00  
Real estate bonds..... 67,000 00  
Individual stock..... 83,000 00  
Scrip stock..... 49,917 72  
City stock..... 400,000 00  
Howards' subscription..... 316,000 00  
All other debts, say..... 10,000 00

\$1,323,341 18

## ASSETS.

Bonds of the city.....\$193,000 00  
Bills receivable..... 4,770 00  
Real estate..... 283,751 66  
Howards' subscription..... 306,500 00  
Stock of the city..... 200,000 00  
Stock unpaid on books..... 29,915 00  
Instruments, office furniture, &c..... 1,000 00  
Cash on hand..... 168 80

\$1,019,195 46

## RECAPITULATION.

Liabilities.....\$1,323,341 18  
Assets..... 1,019,195 46

Loss.....\$304,145 72

Of the loss the Howards propose to return to the railroad company  
in bonds.....\$57,000 00  
In stock..... 9,410 00  
66,410 00

Leaving a net loss of.....\$237,735 72

The whole amount of stock subscribed by all parties, exclusive of the Howards' subscription and the \$133,250, is \$816,663 38. This amount includes \$49,917 72 scrip stock.

The city's loss will therefore be about \$128,000. If we add the \$133,250 to the original subscription, the city's loss will be about \$110,107. And if we include the Howards' subscription, her proportion of the loss will be about \$79,245. Respectfully submitted,

L. G. MATTHEWS,  
D. M. HOOPER, } Committee.  
W. W. TULEY,

## LEXINGTON &amp; BIG SANDY R. R.—SECRETARY'S REPORT.

OFFICE LEXINGTON & BIG SANDY R. R. Co.,  
June 17, 1877.

To the President and Directors of the Lexington & Big Sandy R. R. Co.:

GENTLEMEN:—I herewith hand you my Report, showing the amount received and paid out to date:

1st—Cash received.  
Proceeds of sale of 200 Clark county bonds.....\$134,124 13  
" " 196 Montgomery " .. 120,198 46  
" " 141 Bath " .. 92,651 50  
" " 1 Carter " .. 660 00  
" " 98 Ashland " .. 60,333 33  
Rec'd on 112 Ashland bonds, which were sold at 66% c..... 6,566 43  
Rec'd for interest and rent..... 81,177 02  
Rec'd for exchange..... 887 02  
Rec'd from stockholders..... 47,865 98  
Rec'd from bills payable..... 97,737 72  
Rec'd from Western Bank, Mass., for which county bonds are hypothecated..... 40,000 00  
Rec'd from city of Lexington..... 1,900 00  
\$694,024 59

2d—Cash paid out.  
For general expenses, including geological survey, engraving maps, &c.....\$ 18,468 68  
Salaries..... 13,494 05  
Advertising..... 240 95  
Exchange..... 1,201 52  
Cross-ties..... 9,133 15  
Iron..... 71,941 44  
Right of way and depot grounds..... 42,954 74  
Insurance..... 570 00  
Locomotive..... 550 00  
Engineering..... 56,793 04  
Construction—old contractors..... 419,869 14  
" new "..... 14,531 10  
Printing..... 340 89  
Commission on sale of bonds..... 1,032 00  
\$694,024 39

3d—Resources of Company.  
Individual subscriptions to be paid in money, and which have been due some time.....\$ 60,000 00  
87 county bonds..... 87,000 00  
112 bonds L. & Coal Man. Co., sold but not paid for.....\$74,656 66  
Less this amount received..... 6,566 43  
68,090 23  
150 bonds city of Lexington..... 150,000 00  
Interest due from city of Lexington, about... 30,000 00  
Depot grounds in Lexington..... 5,750 00  
" Winchester and Mt. Sterling..... 1,250 00  
Land in Fayette county of Graves and Goodwin..... 2,000 00  
Houses and lots in Mt. Sterling, Wyoming, Grayson and Cattletsburg..... 7,000 00  
Cash due for land in Clark county..... 4,000 00  
25,000 acres of coal and iron land at \$12..... 300,000 00  
Depot grounds at Hampton City—the East end of the line—and land over which the road passes, and those contiguous, through the whole line, donated by proprietors or purchasers, and paid for by the company..... 250,000 00  
The Lexington & Frankfort Railroad Company, by a vote of the stockholders, have agreed to subscribe to our capital stock, not to be paid until the locomotive can pass from their road over ours to Mt. Sterling..... 50,000 00  
The Louisville & Frankfort Company, on the same conditions, have agreed to subscribe and pay..... 100,000 00  
\$1,115,180 00

4th—Indebtedness of Company.  
To Western Bank, Mass., for which are hypothecated county bonds.....\$ 40,000 00  
To other banks and banking houses..... 97,707 72  
For chairs and spikes..... 1,370 00  
For right of way..... 4,000 00  
\$143,107 72

All of which is respectfully submitted.  
CHARLES NELSON, Secretary.

## BALTIMORE &amp; OHIO R. R.

CITY CIRCUIT COURT—JUDGE KREBS.—State of Maryland vs. Baltimore & Ohio Railroad Company. Petition of Andrew A. Gregg, James H. Bayfield and others, to be admitted as a party to the suit by the State of Maryland against the company.

The petitioners state that they file the petition on behalf of themselves and of any others who may be interested, and may wish to become parties upon payment of an equitable portion of the costs, or who may become so by order of the Court, and that the stockholders interested in the dividend are so widely dispersed that the petitioners have filed their petition in this form, and they state that the injunction granted grievously affects their interests, and prevents the delivery of the certificates of indebtedness, without any opportunity having been given to the petitioners or to any others, similarly situated, to establish the legality of the dividend.

That the Baltimore & Ohio Railroad Company does not represent the petitioners, and since the filing of the bill has answered it in a manner grossly incorrect and subversive of their rights, and that they believed that the answer was collusively prepared between some of the Directors of the company on the part of the city of Baltimore, and since on behalf of the State of Maryland.

That the allegation respecting the validity of the resolution of December 17, 1856, is untrue.

Messrs. Samuel W. Smith, Wesley Starr, Johns Hopkins, Wm. A. Hack, Nathan Tyson, John W. Garrett, Francis Burns and Wm. Henry Norris, of the petitioners, state that they were directors of the company at the time the resolution was passed, and that they voted for it conscientiously; that they have been charged by the bill with fraud, and that, though a respectable counsel who signed the bill has declared that it was not intended to impute any moral culpability by the language used in the bill, still not one person out of a thousand would so understand the language; but that the fair ordinary import imputes a charge of actual fraud, and the petitioners are therefore entitled to appear to defend their characters.

That it is doubtful if they can appear except by petition, and that if they be denied the right to appear the injunction may be made perpetual, to their irreparable and grievous injury.

The petitioners therefore pray that they may be made parties defendant, in order that they may answer the bill of complaint, and may move for the dissolution of the injunction, and may take testimony to establish the validity of their claim; and therefore that the Court will direct a subpoena to the State of Maryland to be served on Thomas W. Ligon, Governor, and to the counsel for the State, and also to the Baltimore & Ohio Railroad Company, commanding them to appear in Court on a day to be named.

The above named petitioners also file a bill of complaint against the State of Maryland and the Baltimore & Ohio Railroad Company, thus instituting a new suit. The facts which constitute the ground of complaint have already been fully set forth in the various bills, petitions and arguments of counsel, which have been reported from time to time, during the progress of the litigation growing out of the declaration of the extra dividend.

CIRCUIT COURT OF THE UNITED STATES.—David C. Wallace vs. The Commissioners of Knox County. Action of assumption to recover the amount of certain coupons of bonds issued by the county of Knox upon subscription to the Ohio & Mississippi Railroad Company. The question arose upon demurrer to the amended pleas, that were not decided by the Court in this case, as previously reported, and were argued by Mr. N. C. McLean and Mr. Judah for the plaintiff, and by Mr. McDonald and Mr. Thurman for the defendant. The amendment to the charter of the Ohio & Mississippi Railroad Company provides that "it shall be the duty of the sheriffs respectively of the counties of Knox, Daviess, Martin, Jennings, Ripley and Dea born, forthwith, on the first Monday in March next thereafter, to determine whether said county shall subscribe for the stock of the Ohio & Mississippi Railroad Company."

Judge McLean held that this section was merely directory to the sheriffs, and that the forthwith was not a limitation of the time of the exercise of the power, but it could be exercised by the sheriffs afterwards—a reasonable time before the election. The same section of the charter provides "that the County Board of any one of said counties may, within one week prior to the said election, increase or lessen the amount to be subscribed by such county, of which action notice shall be given at the different precincts of said county on the day of election." Judge McLean held that this was not a limitation of the time and place at which the notice of the action of the County Board might be given, so as to exclude all other times and places of giving the notice. The Judge remarked, in the course of his opinion, that these questions ought not to be held to a rigid technicality, as in cases where no important consequences were involved. These were great and important questions, involving public as well as private considerations, and should be decided so as to carry out in good faith the contracts and objects of the parties where, as in this case, no fraud is set up on either side.

Judge Huntington held that it was not competent for a city or county to go behind their own records to show that the votes of the people were not legally taken, where the corporate authorities had acted upon the vote, and made the subscription, and the record was unrevoked; that to permit them to do so would be a fraud upon the holders of their bonds, who had received them without notice of such defense; all the public could look to in such a case would be the records of the corporation, importing verity on their face.







## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup't.  
Racine, May 15, 1857.

H. S. DURAND, President.

**Harlan & Hollingsworth,**  
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
**MACHINERY.**

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

ENGRAVERS AND PRINTERS.

engraved in a style corresponding in excellence with that of Bank Notes—

RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, Drafts, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order a superior quality.

The above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, two above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEW & LEAVITT.

## Wire Suspension Bridge for Sale.

SEALED Proposals are asked until May 1st, 1857, for the purchase of the Iron Cables, and Suspension Rods and other materials, &c., of the Wire Bridge over the Kentucky river at Frankfort.

There are eight Cables about 580 feet long, each comprised of 300 strands of No. 10 wire, a number of guy ropes, suspension ropes, bolts, anchor iron and wooden materials, used in said bridge. Those desiring to use such materials will find this an excellent opportunity of procuring them. Said bridge is nearly new only having been built four or five years since.

Persons desiring to purchase will address the undersigned at Louisville, Kentucky.

The Company reserve the right to reject all proposals made, should they not be deemed satisfactory.

E. D. HOBBS, President,  
Louisville and Frankfort Railroad.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,  
Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin  
Machines, Lathe, Chucks, Drills, Files,  
and all required

Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

LOCOMOTIVE HEAD-LIGHT,  
Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lamps,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures  
Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

WASTE,

Baggage Barrows and Checks, Freight Trucks,

CAR FINDINGS,

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED. oc23-ly

## E. MENDENHALL,

## MAP, BOOK & PRINT SELLER,

Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, and  
OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,  
Geological and Astronomical Charts, Globes,  
MICROSCOPES, TELESCOPES  
DRAWING INSTRUMENTS, &c.

Publisher of the

Railway Map of the Western States,  
In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO  
the LARGE MAPS OF CINCINNATI and HAMILTON Co.  
Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA  
MAPS OF EVERY DESCRIPTION.

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (5th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
President of the Board.

au-14-ly

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE LIVINGSTON & CO.,  
9 South William street, N. Y.

## ENGINEERING!!

The undersigned is prepared to furnish  
SPECIFICATIONS, ESTIMATES, AND PLANS,  
In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c.  
Particular attention given to the superintending of  
LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,  
While under construction.

AGENT FOR THE PURCHASE of, on commission  
all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for  
ASHCROFT'S STEAM GAUGE, ALLEN and NOY'S  
METALLIC SELF ADJUSTING CONICAL PACKING,  
DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles  
CHAS. W. COPELAND,  
Consulting Engineer,  
64 Broadway, N. Y.

Nov

## W. G. ATKINSON,

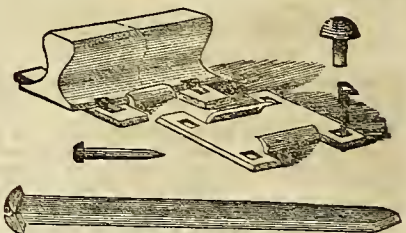
Civil Engineer, Surveyor & Draftsman,  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological maps prepared.

## GREAT WESTERN

## Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.  
feb 25 CORBY, GOSSIN & Co.

## RAILROAD RECORD, BOOK & JOB PRINTING OFFICE, 167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

THEODORE DEHON,  
no13 10 Wall st., near Broadway, New York.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M.; for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 2½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent.

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

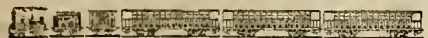
Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap 10 Sup't Terre Haute &amp; Richmond R. R.



## New England Car Spring Company,

47 LA SALLE ST., CHICAGO, ILL.,

MANUFACTURERS of the Patent India Rubber Car Springs, and of the best quality of Vulcanized Rubber Hose, Engine, Hydrant, and Conducing. Sold at wholesale at great discount from list prices.

oct23-2m

CHARLES L. NOBLE, Agent.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING.

PITTSBURGH.

DUNKIRK.

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jyl7

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.  
If Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

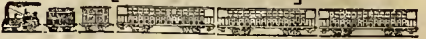
Ag't Cin. and St. Louis Omnibus L  
Office No. 2 Burnet House.

1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:30, 4 and 6:20 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities.—Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M., INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M., MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburgh, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via, Clyde, through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

If Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:20 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:20 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS.

Leave Dayton at 5 and 8 A. M., and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 6:15 and 10:25 P. M.

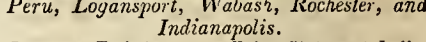
For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for h South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntingdon, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R make close connections at Peru for Indianapolis.

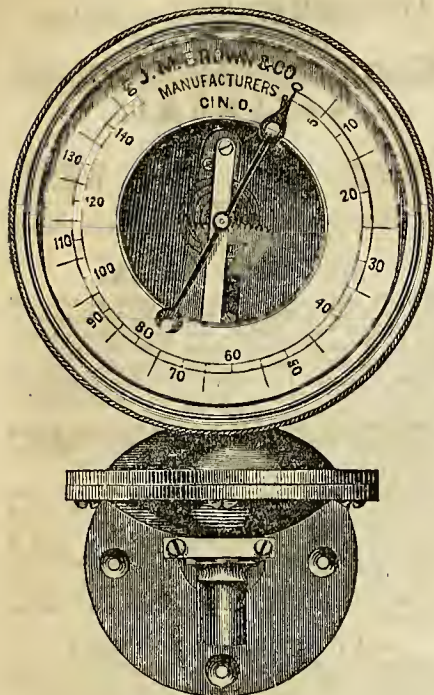
JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Freight Ag't.  
Indianapolis, Sept. 16, 1856. [mh29-ly.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



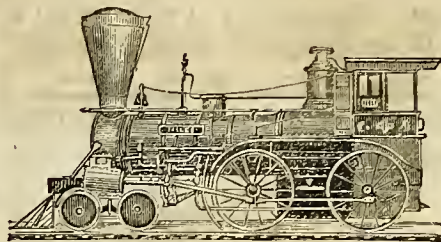
## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
DRILL THE TUBE-PLATES  
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Platers' Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

# LOCOMOTIVE WORKS.



## NILES & CO.,

CONGRESS STREET, CINCINNATI,

BUILD to order Locomotives of any required size or plan, and are prepared to execute all orders in their line with promptness.

Orders solicited for iron and Brass Castings, Flue and Cylinder Boilers, Tyres, Tyre Lathes, Planing Machines, and other tools, Shafting, &c. &c.

Feb. 13 1855-6m.

## RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.

New York, Ap 3, 1856. 9 South William Street.

## A. B. LATTA'S

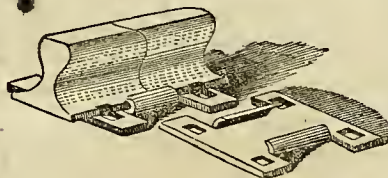
### Patent Mercurial Steam Gauge,

HAS been in use successfully for six years, and proved itself superior to any Mercury Gauge offered to the public, both on Steamboats and Locomotives. The roads that have used these Gauges have proved their superiority to any other Gauge.

We invite the attention of those wanting Gauges to try them before purchasing elsewhere. They can be had at the Buckeye Works, Cincinnati, and are warranted not to break.

ap17 A. B. & E. LATTA.  
J. D. GREEN, C. S. GREEN.

## CINCINNATI RAILWAY



## CHAIR WORKS,

ESTABLISHED JAN., 1852.

South Side Congress St., East of Canal,  
CINCINNATI, OHIO.

J. B. GREEN & BRO. PROPRIETORS,

WE have in use improved machinery, capable of Turning out fifty tons per week, and will contract on favorable terms, with responsible parties, to manufacture any amount of

### Wrought Iron Chairs.

which we warrant of the best quality and the most perfect fit and finish, with a smooth, level bearing on the cross ties.

Engineers, Trackmasters and Railroad men in general, will be furnished with samples by addressing a line.

Feb. 14 1y.

## THE SCHENCK MACHINERY DEPOT

AND

Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Up-right Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

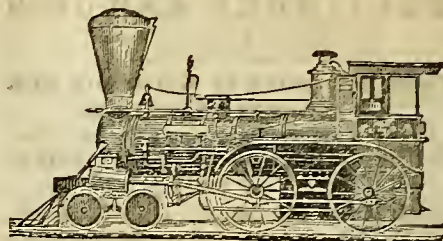
### Oak-tanned Leather Belting,

Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.

A. L. ACKERMAN, PROPRIETOR

Aug. 9 1y

# CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jars Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers, Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.

†oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

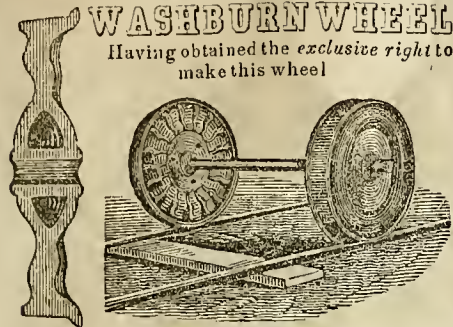
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEAL. (The highest prize) awarded to these pumps at the Ohio Mechanics' Institute. June 18, 1855-1



# FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

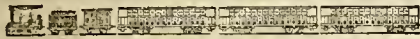


**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

# MUSKINGUM WORKS ZANESVILLE, OHIO.



# DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

# CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

# WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

# BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed to

**DOUGLASS, SMITH & CO.,**  
Janl. Muskingum Works, Zanesville, O.

**J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL**

# DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* **JOSEPH DAVENPORT.**

# S. C. THOMSON & CO MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j NEWARK, N. J.

# GENERAL

# RAILWAY SUPPLY AGENCY.

# SNOOK & HILL'S PATENT

# LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

# JOHN W. KELLY, MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

# RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

# HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,

# JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

# W. G. HYNDMAN'S



# Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for building of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address **W. G. HYNDMAN,**  
ap23 41 East Second street, Cincinnati, O.

# RAILROAD IRON.

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,**  
July 31 9 South Wmiam street, N. Y.

# THOMAS D. STETSON, Mechanical Engineer,

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.  
Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions.  
ec23

**G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.**

# BUSH & LOBDELL

Wilmington - - - - - Delaware.

MANUFACTURERS OF

# CHILLED WHEELS

AND

# TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

# CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

# WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

# ALBERT M. LEA,

CIVIL ENGINEER,

KNOXVILLE, TENN.,

**D. D. MILLER,**

Manufacturer of

LOCOMOTIVE, RAILROAD AND HAND

LANTERNS,

190 Water Street New York.

# RAILROAD MAP OF UNITED STATES

NOW READY.

A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,**  
31, '55] 3 College Hall, Cincinnati O.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINKLANDER.  
JAMES A. BOORMAN. EDWIN A. POST.

**RHINKLANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON.

feb5-tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.

dec11 Second avenue, corner of 52d street, N. Y.

**T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,**

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened, the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building;

**The Great Arnold Secret Discovered at Last**

**BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**



edgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes. **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties waiting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton &amp; Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Central Ohio; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.**

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.  
Printed to order in the best manner.

Binding done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,  
Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLEYS and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.

ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C.

ap12

**Thorough Bred Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown Cullage. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JULY 2, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING,  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " " per month.....	3 00
" " " six months.....	12 00
" " " per annum.....	20 00
One column, single insertion .....	4 00
" " " per month.....	10 00
" " " six months.....	40 00
" " " per annum.....	80 00
One page, single insertion .....	10 00
" " " per month.....	25 00
" " " six months.....	110 00
" " " per annum.....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 19.

#### EDITORIAL.

Crops and Railroads.....	301
Hamilton and Fort Dover Railroad, Ca. ....	302
Pennsylvania Public Works.....	302
Decisions.....	303

#### RAILROADS.

Pacific Railroad of Mo.—Southwest Branch.....	303
Hamburg and Columbia Railroad.....	304
Texas Central—Freight report.....	305
The Pacific Railroads.....	305
Euphrates Valley.....	305
Fox River Valley Railroad.....	305
Cleveland and Mahoning Railroad.....	306
Suez Canal.....	306

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	309
London Quotations.....	309
Monetary and Commercial.....	309
Sales at the New York Stock Board.....	309
Cincinnati Stock Sales.....	309

#### MISCELLANEOUS.

Norman House and Park.....	309
Shareholders Duty.....	310
Damages for injuries by the Longueil explosion.....	310
Buffalo Railroad Convention.....	310
Another Asiatic Railway.....	310

MISSISSIPPI AND MISSOURI R. R.—The people of Pottowatimie Co., Iowa, have decided in favor of loaning \$300,000 to this company.

—ALLEGANY VALLEY R. R.—An investigation is going on into the circumstances attending the city and county subscriptions of stock to this road.

—EAST PENNSYLVANIA R. R.—Ground has been broken on this road, with the intention of completing it from the point of commencement, six miles east of Reading to Allentown.

—GREAT WESTERN R. R. Ill.—The committee of the stockholders of this road recommend the issue of \$2,000,000 of Income Bonds.

### CROPS AND RAILROADS.

We have more than once alluded to the intimate relation which exists between the crops of the country and the business of railroads. In a former article we showed that the immense freight of railroads, so far surpassing that anticipated by the most sanguine friend of the railroad system, was owing to the great development of the Industrial Arts, of which that of agriculture is one of the principal, and that this development was in a far greater ratio than that of population. Of course, as this excess of proportion is altogether a surplus, it follows that is a clear gain to railroads and other means of locomotion. For example, suppose a Western State raised, ten years since, 20,000,000 of bushels of Indian corn, and that was enough for its consumption barely. Now it has increased 30 per cent. in population and 80 per cent. in grain crops. What is the result on the transportation of freight? The elements are these:

	Busbels.
Corn crop (at 80 per cent.).....	36,000,000
Consumption (at 30 per cent.).....	26,000,000
Surplus.....	10,000,000

Now this ten millions of bushels (equal to three hundred thousand tons) has to be moved, because it is a surplus. It may go as corn, cattle, pork, or whisky; but go it will. This process has been going on rapidly throughout the country, and it is this which has proved the salvation of the railroad companies; for, had they been obliged to sustain the increased cost (beyond all estimate) and the increased expenses (likewise beyond estimate), without these increased freights, arising from the industry of the country, nine out of ten of the companies would have been insolvent.—Freights, therefore, have saved railroads. The increase of freights is large and certain; but, that which constitutes the largest part, the crops of the country, are, from year to year, very variable. While in the course of five years the crops largely increase, they sometimes largely diminish in a single year. For example, in the five years between 1851 and 1856, the corn crop of Ohio varied between 52,000,000 bushels and 87,000,000 of bushels—the one being a minimum and the other a maximum—the one in 1854 and the other in 1855. Now the difference between these crops was wholly a surplus, being no less than 35,000,000 of bushels! This is fully equal to one million of tons!

So, the difference between the maximum and minimum crops of wheat was 20,000,000 bushels; equal to 600,000 tons! We see, therefore, how vast a difference may be produced in railroad freights from the reduction or excess of a single crop. Let us take Ohio as a sample. In the year 1855 the corn crop increased 60 per cent. on that of 1854 (that being a minimum), although the increase was only about 25 per cent. on the average.

But, in 1856 there was a great falling off—equal to one-third the entire crop; so that in 1856 probably not more than 60,000,000 was produced. The same was the case with the wheat crop. The falling off was general, being a reduction of the average per acre throughout the State. The reduction of railroad freights is quite manifest this year on the great lines leading to the Atlantic.

This year (1857) we have, from the indications of nature, the promise of large crops. We cannot predict them with certainty, but we may assume it for the purposes of a present calculation. If the wheat and corn crops of Ohio are good this year, looking to the amount sown and the average per acre, we shall have the following results, by which estimate the freight of 1857–8:

	Busbels.
Wheat, 1857.....	25,000,000
Corn, 1857.....	85,000,000
Aggregate.....	110,000,000
Wheat, 1856.....	15,000,000
Corn, 1856.....	60,000,000
Aggregate.....	75,000,000
Excess of 1857 over 1856.....	35,000,000 bushels.
Excess of tonnage.....	1,050,000 tons.

Thus, on the assumption of good crops for the State of Ohio in 1857, the excess of tonnage furnished the railroads will be a million of tons! But, let us suppose the valley of the Ohio has good crops; what will be the result? The gain for

	Tons.
Ohio will be.....	1,050,000
Indiana ½.....	525,000
Illinois ½.....	525,000
Kentucky ¼.....	262,500
Tennessee ¼.....	262,500

Gain of 1857 over 1856..... 2,625,000

The accession of receipts on Western and Central railroads, for this cause, must reach at least twenty millions of dollars! Now, it is not difficult to foresee that if such an increase of freight takes place, the influence on railroad profits and stocks must be very great. Contrast it with what has taken place. Since 1853 we have not had one full crop of wheat, and but one of corn—that of 1855. The prices of all articles dependent on vegetable food prove this, although other causes, such as we have heretofore mentioned in the deficiency of agricultural labor, have contributed to the same end. The uniform high prices of all food prove that the supply is scant. If the year 1857 proves abundant in its harvest, the effect on railroads, and, in fact, on all stocks, will be immediate and great.

We do not mean to "count our chickens before they are hatched," for no mortal can foresee the course of Providence. We merely point out the decisive effect of good crops on the railroad interests of the country, and show what is very evident to us—that the depreciated rates at which stocks are sold are not based on correct elements of calculation. The state of the crops, the unfinished state of the roads, the difficulties of transportation in the early period of their career, have not been



taken sufficiently into view; and especially has the deficiency of crops in the last three years been disregarded. We confess to have yet much faith in the ultimate value of railroad stocks—where they have been honestly conducted—and shall not lose that faith till we have had two goods crops, and tested their influence on the railroad movement.

#### HAMILTON & PORT DOVER R. R., CA.

The reports of Canadian railroads, or, as they call them, railways, are not as interesting to our readers as those of our own country, but yet they are of service by way of comparison with our own. Canadian railroads, thus far, have not been as successfully conducted, either in construction or management, as our own.

The Hamilton & Port Dover R. R. is designed to be 40½ miles in length. It was put under contract to Messrs. Moore, Pierson & Co., by the former Board of Directors. The contract price was \$1,216,000, and the expected items were to be \$550,800 additional. The present Board of Directors cancelled the contract with this firm, on the ground that they believed that it was originally obtained by misrepresentation and collusion. They claim that the engineer's estimates for the work were \$936,189 93; or, with 10 per cent. added for contingencies, \$1,029,807. Since the annulling of the contract, Mr. John T. Clark, formerly State Engineer of New York, has been made Chief Engineer, and the surveys and estimates have been thoroughly revised.

The following is the statement of finances as contained in the report:

The receipts on the share capital, on the 31st May, are as follows:

	Shares.	£	s. d.
Municipal subscription.....	5,400	38,000	0 0
Private do .....	1,042	5,213	17 6

#### EXPENDITURE TO THE SAME DATE.

	£	s. d.
Construction account (subject to a revised estimate of work done, now preparing).....	22,991	13 0
Iron rails.....	1,083	7 11
Lands for track and depot grounds.....	25,442	17 3
Engineering.....	5,614	16 2
Salaries.....	832	9 1
Incidental and office expenses, taxes, &c.....	624	5 3
Interest and discount.....	2,080	12 1
Printing, Stationery, &c.....	241	11 2
Parliamentary expenses, London Agent, &c.....	566	7 10

£59,277 19 9

The Directors for the ensuing year are—Sir A. N. MacNab, G. W. Burton, W. P. McLaren, Ed. Jackson, M. W. Browne, John Brown, Walker Powell, James Little and N. Merritt.

—DAYTON XENIA & BELPRE R. R.—A meeting of the citizens of Washington in Fayette county has recommended the immediate completion of the six miles of this road between Xenia and Washington. The effect of this would be to give the road a connection with the iron and coal beds of this state over the Cincinnati, Wilmington and Zanesville Railroad.

#### PENNSYLVANIA PUBLIC WORKS.

The long agitated question of the sale of the Main Line of the public work of this state is at last settled by the actual sale of these works in conformity with the law passed by the Legislature last winter as interpreted by the Supreme Court in its decision on the Injunction case. The leading opinion was delivered by Chief Justice Lewis. The chief points of the decision as given by the Pennsylvania Enquirer are as follows.

1. The Legislature had constitutional authority to authorize the sale of the Main Line.

2. The Pennsylvania Railroad Company may become a competitor and purchaser on equal terms with every other person or corporation.

3. The act authorizing the sale is entirely constitutional, except that part of the proviso of the third section, which requires the Pennsylvania Railroad Company to bid \$1,500,000 more than any other bidder, and in consideration thereof, proposes to release the said company, and also the Harrisburg and Mount Joy Company, from the taxes therein stated.

4. The Legislature cannot bind the State by contract from imposing equal taxes, and that the condition of sale to the Pennsylvania Railroad Company in that respect is void, and an injunction to that extent is granted; but

5. That in all other respects the sale may go on, and the Pennsylvania Railroad Company may bid and purchase on the same terms as other corporations or individuals.

6. It is ordered that upon the complainants, or either of them, filing a bond in the penal sum of one thousand dollars, with sufficient sureties to be approved of by this Court, or any Judge thereof, conditioned to indemnify the defendants from all damages that may be sustained by the injunction granted on this motion, an injunction be awarded, commanding the Pennsylvania Railroad Company and its officers and agents named as defendants in this bill, to make no bid for or purchase of the Main Line of the Public Works, under that part of the proviso in the third section of the act of 16th of May, 1857, which requires the said Company to pay in addition to the purchase money at which the Works may be struck down the sum of one and a half million of dollars, and in consideration thereof assumes to discharge forever the said railroad company, and also the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company, from the payment of all taxes upon tonnage and freight over said railroads; and also to relieve the said Pennsylvania Railroad Company from the payment of all other taxes or duties on its capital stock, bonds, dividends or property, except for school, city, county, borough or township purposes. And also commanding the said Pennsylvania Railroad Company, and its officers and agents aforesaid, strictly to abstain from accepting any assignment on the terms stated in the aforesaid part of the said proviso, or executing, or delivering to the Treasurer of the State any bonds of the said Company, for any greater amount than the sum at which the Main Line of the said Public Works may be struck down at a public sale, on a fair and equal competition with all other bidders.

The following is the property sold as enumerated by the same Journal

The Philadelphia and Columbia Railroad, the Allegheny Portage Railroad, including the new road to avoid the inclined planes,

with the necessary and convenient width for the proper use of said Railroads, the Eastern division of the Pennsylvania Canal, from Columbia to the junction, the Juniata division of the Pennsylvania Canal, from the junction to the Eastern terminus of the Allegheny Portage Railroad, and the Western division of the Pennsylvania Canal, from the Western terminus of the Allegheny Portage Railroad to Pittsburgh, and including also the right, title and interest of the Commonwealth in the Bridge over the Susquebanna at Duncan's Island, together with the same interest in the surplus water-power of said Canals, with the right to purchase and hold such lands as may be necessary to make the same available, and all the Reservoirs, Machinery, Locomotives, Cars, Trucks, Stationary Engines, Work Shops, Tools, Water Stations, Toll Houses, Offices, Stock and Materials, whatsoever and wheresoever, thereunto belonging or held for the use of the same; and together with all the right, title, interest, claim and demands of the Commonwealth of Pennsylvania to all property, real, personal and mixed, belonging to, or used in connection with the same by the Commonwealth, on the terms and conditions prescribed by the said Act of Assembly, was sold at the Exchange, to the Pennsylvania Railroad Company, for \$7,500,000. The only bidder was Mr. Edgar Thompson, President of the Company. The attendance at the sale was quite large, and much interest manifested. Governor Pollock was present and made a few remarks.

Among those present were Chief Justice Lewis, Hon. David Wilmot, Attorney General Franklin, and a large crowd of office holders, office seekers, politicians, lawyers, and spectators. Mr. John B. Myers commenced the sale by reading the advertisement, with which all of our readers are familiar. When the bid was made there was much sensation manifested, and when the purchaser was announced, three hearty cheers were given; three more cheers were given for the Pennsylvania Railroad, and three more for Gov. Pollock.

Our space this week does not admit of the decision of the court in full, but we shall give it next week as a document that our readers may value.

The good resulting from the sale, may be summed up as follows.

In the first place, the State Debt will be liquidated to the extent of \$7,500,000.

In the second, a source of fraud, corruption and speculation will be taken from the hands of partisans and politicians.

In the third, the State taxes will be reduced.

In the fourth, the State Treasury will be replenished.

In the fifth, the great line of railroad which has heretofore been divided, and in the hands of two parties—the Canal Commissioners and the Railroad Company—will now be under the control of the latter, and thus many difficulties and misunderstandings will be obviated.

—CHICAGO IOWA & NEBRASKA R. R.—The cars are running on this road 20 miles to Dewitt.

—LOCOMOTIVE EXPLOSION.—An explosion of a locomotive occurred last week on the Buffalo and New York city R. R. Near Alden.



—MICHIGAN CENTRAL R.R.—At the annual meeting of the stockholders of this company recently held in Detroit the following gentlemen were elected directors for the current year.

J. W. Brooks, J. M. Forbes, R. B. Thayer, W. W. Hunnewell, Boston; Erastus Corning, Albany; D. D. Williamson, John C. Green, New York; Elon Farnsworth, Detroit.

—PERU & INDIANAPOLIS R.R.—The last four miles of flat bar rail on this road is to be replaced with T rail.

—BUFFALO & STATE LINE R. R. Co.—At the annual meeting of the stockholders of the Buffalo and State Line Railroad Co., the following named gentlemen were elected Directors for the ensuing year: George Palmer, Dean Richmond, John Wilkeson, James S. Wadsworth, Henry L. Lansing, Hamilton White, Joseph Field, Wm. Williams, Alanson Robinson, Homer Ramsdell, Constant Cook, Charles H. Lee, Geo. W. Patterson.

The Directors re-elected the following officers: President, Geo. Palmer; Vice President, Dean Richmond; Secretary and Treasurer, Wm. F. Staunton; Superintendent, R. N. Brown; Paymaster, J. H. Galusha.

*Executive Committee*—Dean Richmond, Charles H. Lee, Henry L. Lansing, Joseph Field.

*Finance Committee*—Charles H. Lee, Wm. Williams, Alanson Robinson, Geo. W. Patterson.

**A RAILROAD DECISION.**—A passenger got on the I. C. R. R. at Janesboro, and after riding a mile and a half, the conductor demanded the fare. Passenger offered a \$100 bill, the fare being \$1.55. The conductor told him to get out. The passenger did so, and sued the company for damages. The Court decided in favor of the company, holding—

1. That the conductor was not bound to change the plaintiff's bill, although it may have been genuine.

2. That the offer of the bill, demanding a return of \$98.45, was not a tender of the fare, nor offer to pay it.

3. That upon the demand of the fare and the refusal of the plaintiff to pay it, the conductor had the right to expel the plaintiff from the cars, using no more force than was necessary for that purpose.

4. That when a person goes aboard a passenger car without having paid his fare in advance, and the same is demanded by the conductor of the train, and a refusal to pay it when so demanded, the conductor is not bound to take him to the next station, but may expel him at once, unless by such expulsion the life or health of such person would be thereby endangered.

**IMPORTANT RAILROAD DECISION.**—A decision was recently made in the Court of Common Pleas of Cuyahoga County, by Judge Foote, which is of importance to Railroad Companies and the traveling public. A man had purchased a ticket of the C. C. & C. R. R. Company, at their ticket office, at Cleve-

land, for Shelby, which he was unable to produce when called upon by the conductor, having mislaid it. He was ejected from the train, and in course of time brought suit against the Company therefor. He claimed that after having once paid his fare, he was entitled to ride on the road the distance paid for, that the ticket was the best evidence of the fact, and that its loss being the loss of the best evidence, he could bring the next best to prove his allegation. The defendant claimed that the ticket was negotiable paper, that its production, when called for, was absolutely necessary to fulfill the contract, and that otherwise railroad corporations might be imposed upon by a ticket being used the second time, either by being transferred for consideration, or by being picked up by a third person after having been lost by the original purchaser. The Judges charge restored the latter doctrine, and a verdict was given for defendant.

The Indianapolis Journal publishes the decision of the Circuit Court of the United States of Indiana in the case of David C. Wallace against the Commissioners of Knox County, in that State. The Board, before the adoption of the present Constitution of Indiana, in 1851, in pursuance of the terms of a statute authorizing the same, subscribed \$200,000 to the capital stock of the Ohio and Mississippi Railroad Company, and after the constitution took effect, issued their bonds with coupons, for the payment of the stock, in the usual form. The county failed to pay the interest coupons when they became due, and this suit was brought to recover the amount of the coupons held by the plaintiff as the bearer. The defence rested substantially on the following grounds:—

1. That the subscription was void, the county having no right to make it for railroad purposes.

2. That the bonds were void, having been issued after the taking effect of the Constitution of 1851.

3. That the coupons were void for the want of power to issue them, even if the bonds were valid.

4. That the law of the States submitting the question to the people of Knox County, whether the Commissioners shall subscribe the stock was unconstitutional and void.

Judge McLean decided:

1. That the action could be maintained upon the coupons; that each of the points raised in the defence was unsustainable in point of law; that the subscription was valid and binding upon the county of Knox; that the Court would have compelled by mandamus the issue of the bonds, had the Commissioners refused to issue them; that the subscription having been made before the Constitution of Indiana of 1851 was in force, could not be effected by that instrument; that the issue is not inhibited by the State Constitution which only applies to subscriptions made after the Constitution took effect; nor could the Constitution effect these bonds, even if bonds were named in its prohibition, as they were not a new contract, but merely a consummation of the previous contract of subscriptions that was made before the adoption of the Constitution, therefore both the subscriptions and bonds were protected by the Constitution of the United States; that the coupons were merely incident to the bonds, and derived all the legal effect from the bonds, and were clearly authorized to be attached to the bonds as a matter of convenience and to facilitate the payment of the interest; that the law submitting the question of the subscription to the people of the counties was a valid and binding enactment.

## Railroads.

### PACIFIC R. R. OF MO.—SOUTHWEST BRANCH.

The Pacific Railroad Company of Missouri propose to bring out a loan for the purpose of building the Southwest Branch Road, commencing at Franklin, thirty-seven miles west of St. Louis, and extending southwest 283 miles, to the State line in Newton county. The *present terminus* will be at Neosho, sixteen miles shorter, and in the midst of the great lead diggings.

The company own one million and forty thousand acres of land, applicable to the construction of this road. The land is first rate in quality—much of it fine, rolling prairie, interspersed with sufficient timber. Some of the lands contain rich lead and iron mines; and the extent and richness of the mines located on the company's lands, added to the vast amount of choice prairie, makes the land grant, as an aggregate, the most valuable belonging to any railroad in the west. About 100,000 acres of the land is subject to pre-emption, at \$2 50 per acre.

The company have executed a first mortgage upon the Branch Road to be built and one million acres of land, to secure the payment of construction bonds, not to exceed ten million dollars in the aggregate, the bonds to bear date January 1st, 1856, payable twenty years after date, with 7 per cent. interest, payable semi-annually in the city of New York.

The bonds are convertible into stock, or will be received in payment for land.

#### GUARANTEE OF BONDS.

By a law of the State of Missouri, passed December 10th, 1855, and amended March 3d, 1857, the State guarantees the company's mortgage bonds, above described, to the extent of four million five hundred thousand dollars.

The form of guarantee is very strong, the State fully assuming the liability of the bond, both principal and interest, in case of any failure by the company; and to this end the State has made provision for paying the interest of the guaranteed bonds out of the State Sinking Fund, in case of failure to pay by the Company.

The late banking law, requiring all the banks of the State to purchase and permanently hold Missouri State Bonds to the amount of 10 per cent. of their capital, puts the guaranteed bonds on the same footing with other State Bonds.

These bonds are also exempted from all taxes when held by citizens of Missouri.

From the facts above stated, it will be seen that the bonds offered are a first class security, being secured by the first mortgage on an important road, that is to drain a vast country, without fear of competition; which mortgage also include a one million acres of land,



worth, with the road built, more than fifteen millions of dollars.

And for the bonds to be first used, the State becomes an endorser, assuming all the liabilities of the bond, and in all the legislation in reference to them, treating such guaranteed bonds as a liability of the State. The money derived from the bonds is to be expended in building the road, and in case of failure, the bondholder has his security in the road, the land, the faith of the State, and in the assets of the Pacific Railroad Company, with the main road opened 125 miles and now doing a good business, to be greatly increased by the extension of the road 40 miles further during the present year. Can any security be stronger, or furnish a safer investment?

The country to be drained by the Southwest Branch, when built, embraces over nineteen thousand square miles, within the State of Missouri, besides drawing a large trade from the northwest of Arkansas, the south of Kansas, and the Indian country. The business of this vast country must rapidly increase from the tide of emigration that is now setting in to the Southwest, attracted by the beauty and health of the country, and the uniform temperature and mildness of the climate.

This branch has strong claims to become the opening of the great route to California; as, in adopting a route for a railroad to the Pacific two points are to be considered: *First*, a route passable at all seasons of the year, unobstructed by snow or storms; such a route it is believed cannot be obtained much north of the 35th parallel; and *second*, a route as near central to all the States of the eastern seaboard as is practicable. The route by the Southwest Branch, thence up the Canadian fork of the Arkansas, by Anton, Chico, Albuquerque and Walker's pass, is believed to combine more of the requisites for a national highway to the Pacific than any yet explored.

But, strong as the claims of this road may be to become a part of the great Pacific Road, the success of the enterprise is not dependent upon its being adopted as the great national route, as the fertility and extent of the country within Missouri and the adjoining territories, that must always be tributary to this road, will insure a permanent and paying business.

The Southwest Branch is all under contract, Messrs. Diven, Stancliffe & Co., of Elmira, New York, undertaking to construct the whole road complete for the sum of \$7,671,680, or \$27,105 per mile. The resources of the company are the mortgage bonds above mentioned and a private subscription of \$356,000, conditioned that it be expended on the Southwest Branch. The work has been commenced on the eastern end, and \$394,351 expended prior to March 1st, 1857. The iron has been purchased for twenty-five miles of the Branch, and will be laid down by the close of the year.

The Branch is a part of the Pacific Railroad of Missouri, it all being one common stock. The main road, commencing at St. Louis, extends by way of Jefferson City (the capital of the State) to Kansas City, on the western boundary of the State—whole length 280 miles. The road is now open to Jefferson City, 125 miles, and doing a good business—the receipts for the last month being \$70,000.

The condition of the main road may be gathered from the annexed extract, taken from the annual report submitted to the stockholders in March, 1857. The State holds a first mortgage on the main road to secure the payment of State Bonds issued and to be issued to the company:

#### CONDITION OF THE ROAD.

In compliance with the requirements of the charter, the Board of Directors of the Pacific Railroad present their report upon the condition of the company to the annual meeting of the stockholders.

The total amount derived from stock subscriptions for the Main Line to March 1st, 1857, is.....	\$3,093,633 68
Amount derived from Freedland Bonds.....	14,000 00
Amount of subscription for Main Line yet due.....	675,355 23
Amount of unsold Freedland Bonds, being secured by mortgage on 127,000 acres of land belonging to the Main Line, all situated within sixty-five miles of St. Louis..	596,000 00

Assets proper of the company.....	\$4,371,688 26
State Bonds issued and expended.....	4,700,000 00
State Bonds to be issued and expended....	2,300,000 00

Total assets of Company applicable to Main Line from St. Louis to Kansas, expended and unexpended.....	\$11,371,888 26
Amount of expenditure for Main Line, including discount on bonds, interest on money borrowed from time to time, and interest paid on State Bonds during the construction of the work, and all incidental expenses.....	8,200,841 94

To represent this expenditure, we have the road open and in good running order from St. Louis to Jefferson City, 125 miles; we have depot and other lands in St. Louis, as follows: Depot grounds extending from Seventh to Eleventh streets, and bounded north by Poplar street and south by Cerre street, containing over twelve acres; depot grounds west of Fourteenth street, containing about four acres.

Land at Seventeenth street, containing 14½ acres; land at machine shop, containing 18 acres; other fractions purchased within the city in procuring the right of way, amounting in the aggregate to about seven acres.

The money expended for the purchase of these lands was considered at the time a heavy draft upon the limited means of the company but time has shown the propriety of the expenditure, as all the land, except the fractions, will be needed for the growing business of the company, and the land purchased has advanced from 100 to 300 per cent. in value since the purchase.

The company have depot buildings and freight houses at St. Louis, Jefferson City, and all the principal stations along the line; a machine shop, supplied with all the tools and machinery necessary for the repair of lo-

comotives and other work of the company; a car shop, at which all the cars of the company are built and repaired.

We have 26 locomotives, 15 first class passenger cars, 3 second class do., 4 baggage and mail cars, 188 freight cars, 106 gravel, wood, hand and iron cars.

We have fifty-two miles of road west of Jefferson City under construction; the grading and masonry for forty miles nearly completed; the ties mostly delivered; the iron purchased and now at New Orleans; so that we shall have the road opened into the rich country south of Booneville, in time to secure the fall trade of that region.

With the road open to Round Hill, we shall have overcome all the serious difficulties of the route, and have reached a point which will insure a *paying business* upon the whole cost of the road, if we should never go further; and to this consolation we can add the assurance that, from Round Hill, every additional twenty miles of road that penetrates the rich country west of that point will add greatly to the amount and profits of our business.

**HAMBURG AND COLUMBIA RAILROAD.**—The numerous projects on foot in relation to air-line roads in different parts of the country, to shorten travel and increase traveling, render it important to Columbia that we should renew the enterprise of building a railroad from Columbia to Hamburg. The subject has been so fully discussed, and the advantages and importance so repeatedly brought to the notice of the public, that it is useless to make any repetition now. The necessity of this proposed line is admitted by all, and the completion of the Virginia and Tennessee Railroad will soon show us the value of shortening the line of travel between the North and South.

The only question for us is, can we build the road? And the reply is we can.

The estimate of the engineer, whose report was made to the citizens of Columbia, is that by the longest route (the ridge) the cost will be \$1,105,625, and stocking the road with locomotives and cars \$110,000 more—\$1,215,000.

The subscriptions may be estimated as follows:

By Columbia.....	\$300,000
Charlotte and South Carolina Railroad.....	200,000
North Carolina.....	75,000
The ridge line.....	100,000
In work on the line.....	125,000
	\$800,000

The State has inaugurated a new and very proper policy towards railroads, in the case of the Charleston and Savannah Railroad, which, of course, she will extend to other roads, viz: to advance \$5,000 per mile for every mile ready to receive iron. At this rate, the Hamburg and Columbia Road will receive \$370,000, making \$1,170,000, nearly enough to build this road.

We throw out these ideas for the reflection of the friends of this road, who, we believe, can, by a vigorous effort, carry it through successfully. We will recur to it again.—*South Carolinian*.



*Report of Freight which passed over the Houston & Texas Central Railway during May, 1857.*

Freight sent from Houston to Cypress:—472 bbls. mdse; 1,026 sks. do.; 60 half bbls. do.; 99 bbls. do.; 106 bars iron and steel; 7 slabs do.; 77 cases mdse; 4 crates do.; 10 ps. castings; 5 nests tubs; 15 pkgs. furniture; 21 boxes do.; 5 kits fish; 2 corn-shellers; 1 iron safe; 17 horses; 21 chains; 4 demijohns; 2 thrashers; 10 buggies; 12 iron axles; 2 pianos; 541 boxes mdse; 201 kegs do.; 35 bales; 22 cans sundries; 15 bbls. iron and steel; 30 coils rope; 20 trunks mdse; 51 bags do.; 5 hhds. do.; 6 doz. buckets; 3 ps. furniture; 5 tierces; 2 wagons; 8 pkgs. sash; 2 carriages; 5 plows; 4 stoves; 1 straw-cutter; 62 bbls. shingles; 2 fanning machines. Amounting to \$621 85.

Freight sent from Houston to Hockley:—72 bbls. mdse; 355 sks. do.; 1 can do.; 10 half bbls. do.; 30 cases do.; 8 bbls. do.; 23 pkgs. furniture; 6 ps. do.; 11 buggies; 1 carriage; 62 boxes mdse; 30 kegs do.; 19 bales do.; 3 casks do.; 9 bags do.; 2 stoves; 8 ps. castings; 9 horses; 1 stage coach; 1 mule: Amounting to \$224 40.

Freight sent from Cypress and Hockley to Houston:—171 bales cotton; 173 beef hides; 31 horses; 10 rolls leather; 5 bbls. mdse; 2 cows and calves; 32 ps. bacon; 27 bags wool; 5 bbls. deer skins; 6 buggies; 21 boxes mdse; 3 bales do.; 2 mules; 9 trunks.

Amounting to.....\$ 225 90  
Amount of receipts from passengers..... 1,988 90

RECAPITULATION.

Amount of freight sent from Houston to Cypress.....\$ 621 85  
Amount of freight sent from Houston to Hockley..... 224 40  
Amount of freight sent from Cypress and Hockley to Houston..... 225 90  
Amount of receipts for passengers..... 1,988 90

Total am't of receipts for May.....\$3,061 65

W. R. BAKER, Secretary.  
Per LOUIS KOSSE.

THE PACIFIC RAILROADS.

It is generally well known that there are two railroad enterprises now being prosecuted, the design of both of which is to connect El Paso, and ultimately the Pacific, with the Mississippi river. These roads are, respectively, the Southern Pacific Railway Company, and the Memphis, El Paso and Pacific Railroad Company. The design and object of these separate companies is not generally understood. We will give, in brief, their history and present position.

The Southern Pacific Road is the same that has more generally borne the name of Walker & King, the company to which the State made so magnificent a grant of land, requiring, as pledge, however, of the good intentions of the company, that they should deposit \$300,000 as security in the State Treasury. This security was offered in soap-mine scrip, and stock of a Wild Cat Tennessee bank, and was rejected. Since its rejection the company has been mostly at work through the newspapers, and until recently, it has been the general opinion that its operations would be mainly confined to that field.

One plan adopted, and which is still in operation by this company, is to sell one hundred dollars worth of stock in the company for \$5. They expected to sell in this way about a hundred millions, realizing five millions of dollars. With this amount it was their inten-

tion to build, say two hundred miles of their road, and then on that and the land donation of ten thousand acres to the mile, as a basis they could negotiate loans from time to time, or sell lands enough for the purpose, to push the enterprise through to El Paso, six hundred miles further. The great trouble, however, is that, although they in this way have raised hard upon three millions of dollars nominally, has cost them so near this amount, that they are yet at work, at the end of four or five years on the first twenty-five miles of the road, and really not three hundred thousand dollars worth of work and property to show for the whole! Still they are pushing the matter on, and although we lost all confidence in the concern in August, 1854, still we shall be glad to see evidences of its success, and really hope there may be something in the company besides wind after all. So railroads are built it matters little to us how they are done.

At present this company is grading the second ten miles, and has iron for twenty-five miles ready to be laid down. The eastern terminus of the road is near Soda Lake, and it runs thence to Marshall, in Harrison county.

At the last session of the Legislature a charter was granted to the other Pacific company. The design of this company is to connect with the Cairo and Fulton road between Sulphur Fork and Red River, in Bowie County, about sixty miles North of the Eastern Terminus of the Southern Pacific Road, and to run "thence in a westwardly direction to the town of El Paso." The object of this road is to furnish railroad privileges to a large and rich country, comprised in the counties of Bowie, Titus, Red River, Hopkins, Lamar, Hunt, Fannin, Dallas, Collin, Denton, Tarrant, Grayson, &c., and a connecting link in a chain of roads from Houston to Memphis, Cairo, &c. Another object was, in case of the loss of the charter of the Southern road, through failure to comply with the conditions, to have another company pushing a road in the direction of El Paso, and thus giving additional security of the ultimate location of the great Atlantic and Pacific railway connection through the centre of Texas.

The company is now fully organized, and their road is located for some distance though we do not know how far. We believe also that some work is being done in the grading.

A proposition has been made by the Pacific company to unite the two roads somewhere West of the Trinity, and thus by consolidating the strength of the companies to push a trunk road on with greater rapidity. This proposition was rejected by the Memphis and El Paso company, and this action is the theme of considerable discussion, among the newspapers in the interest of either company. Whether this action was politic or not we do not know, nor is it our business to enquire.

This is the present position of two great enterprises in both of which we are equally interested, and in the successful prosecution of which our State will gain vastly in wealth and prosperity. Both of them through the H. & T. C. Railway give us connection with the terminus of each on the Mississippi, and when pushed westward with El Paso, New Mexico and California. They have our hearty wishes for ultimate success. And though we may have advised one of them to use less humbug, it has only been with desire to see the strength thus wasted, applied to the real hard work of the road, to the success of the

company rather than to the enriching of individual members who are playing a game too vast for their capacity.—*Houston Telegraph.*

**EUPHRATES VALLEY.**—It is difficult to make a strict calculation of the expense of constructing this railway; but one important point is already ascertained—the existence of a prodigious abundance of necessary materials of all descriptions—stone, chalk, iron, wood, &c.; the two former found immediately on the spot; the neighboring mountains will furnish all the wood, the sides of the Amanus and Taurus having been renowned for ages for the excellence of the timber for building purposes, besides which there are immense forests close to the old port of Selucia and Alexandretta; the mines of Marash, not far distant, produce a large quantity of iron, which was pronounced by the scientific expedition to the Euphrates to be of the first quality, and will supply all the rails required; and on many parts of the line bitumen is found in abundance. Aleppo is 42 miles from Antioch, and contains a population of 90,000 souls, of which 7,000 are Christians. It is a city of every possible resource, and one of the richest and best built in Syria. Antioch has 7,000 inhabitants, of which 1,000 are Christians. Balis contains 3,000 inhabitants.—*London Railway Times.*

[From the Milwaukee Sentinel.]

FOX RIVER VALLEY RAILROAD.

The Board of Directors of the Fox River Valley R. R. Co. have published a pamphlet for distribution among the capitalists of this city and other places, calling particular attention to the condition, prospects and wants of their enterprise, which they justly regard as one of great importance to our city, and to the towns on and near its line. They say, very truly:

We think that if any person will examine the map of that section of the country through which the line of this road is located, they will be satisfied not only of the necessity for the construction of the road, but that all capital invested in the enterprise will be sure to pay a good dividend to the owner.

With regard to the southwesterly connections, the Directors say:

Negotiations have been commenced with a view of securing a running connection with the Rockford & Kenosha Road, of Illinois (which road is now in process of construction) and we have the fullest confidence in being able to complete an arrangement whereby we shall be able to run our trains without change of cars from Milwaukee to Rockford, and thence to Dixon, there to connect with the Chicago & Fulton Road.

The importance of this connection to the city of Milwaukee, to the State of Wisconsin, and to Northern Illinois is not easily over-estimated. The Rockford and Kenosha Road runs in a southwesterly direction from the point of intersection through some of the richest counties of Northern Illinois, a distance of forty miles, to the city of Rockford, a city of about ten thousand inhabitants. The distance from Milwaukee to the State line, by our line of road, is forty-three miles; making the distance from Milwaukee to Rockford, by our line of road, eighty-three miles. The distance from Milwaukee to Chicago, by the Chicago & Galena Road is ninety-two miles, being a saving of distance of nine miles in favor of our road.

They add that a contract has been entered



into with the Fox River R. R., of Illinois, furnishing an opening for a heavy trade in that direction, thus "placing Milwaukee in direct connection with every railroad reaching the Mississippi at any point between Dubuque and Cairo; including, also, those cities."

Besides this, the Board state that:

A conditional contract has been entered into with the Beloit & Milwaukee R. R. Co. to connect the two lines at a point from eleven to twelve miles from the city of Milwaukee, and for the use of a joint line from that point to the city; if that contract is finally consummated, then your company will have to build only 31½ miles of road to connect the city of Milwaukee, by direct routes, with all the cities and villages of the State of Illinois, by the use of that unrivalled system of railroads which are at once the pride and boast of that State and of her commercial city, Chicago.

With regard to the financial condition of the company, we have the following figures:

Individual subscription.....	\$155,700
Corporate do .....	50,000
	<b>\$205,700</b>

Of this amount, \$103,960 has been realized, and there has been expended \$32,305 65.

The resources of the company are given as follows:

Installments called for by the Board, and now due and unpaid.....	\$ 47,964 08
Installments subject to call during the present year.....	32,775 00
Installments subject to call during the year 1859.....	21,000 00
Farm mortgages on hand perfected.....	38,600 00
Eight per cent. bonds on the town of Burlington.....	35,000 00
Eight per cent. bonds on the town of Rochester.....	15,000 00
Bonds of the city of Milwaukee voted.....	34,000 00
First Mortgage Bonds of the company, on 31½ miles of the road, at \$10,000 per mile.....	315,000 00
<b>Total resources.....</b>	<b>\$539,339 08</b>
To which add amount already expended....	32,305 65
	<b>\$571,644 74</b>

The cost of the road, to and including the iron and laying of the track and ballasting, is estimated at \$16,750 per mile, or \$527,625, though the company can contract it for \$16,000 per mile if they can pay monthly estimates in cash. Adding \$290,000 for salaries, discounts, interests, depot grounds and buildings, cars and engines, makes a total of \$727,625 as the cost of the road in complete running order.

The Directors, then, having sufficient resources to build the road to Burlington, have resolved "to call upon the citizens of Milwaukee and those interested along the line for an additional subscription to our capital stock to the amount of \$200,000, with which amount our company will be enabled to put their whole line under contract, and push the same to a speedy completion."

They conclude with the following paragraph, which says, in a few words, all that ought to be needed to give their appeal a ready hearing and consideration:

When we take into consideration that only forty-three miles of road are necessary to connect the city of Milwaukee with all the important points which we have enumerated, rendering by its construction thousands of miles of road already built tributary not only to its growth, but also to the growth and prosperity of the State of Wisconsin, we think we may appeal to the citizens of Milwaukee, and to those interested along the line, in the full confidence that the call which we have made will be promptly responded to, and the

necessary means furnished to complete this road in the least possible space of time; and when completed it will open to the grain market of Wisconsin the whole of Northern Illinois, Central and Southern Iowa; and, in return, the whole of that rich and populous region of country will receive their merchandise, lumber and other commodities from and through the Lake ports of Wisconsin.

JAS. KNEELAND, Pres't.

Milwaukee, June 10, 1857.

#### CLEVELAND & MAHONING R. R.

Statement of gross earnings and running expenses of the Cleveland & Mahoning Railroad from January 1 to May 31, 1857, both inclusive:

MONTH.	Passengers	Freight.	Coal.	Mail.	Total Earnings.	Running Expenses.	Net Earnings.
January..	\$3,331 81	\$3,748 97	\$ 5,683 60	\$839 60	\$13,603 98	\$6,199 43	\$ 7,404 55
February..	3,350 87	2,693 27	6,032 90	230 20	12,312 63	6,815 08	5,497 55
March....	4,353 38	2,747 77	7,049 02	333 63	14,192 63	7,673 08	6,519 55
April....	4,652 33	4,211 39	7,100 61	225 62	16,290 95	8,247 68	8,043 27
May.....	4,013 76	6,410 30	13,700 43	225 62	24,412 63	9,629 75	14,782 88
<b>Totals..</b>	<b>\$19,607 13</b>	<b>\$18,800 73</b>	<b>\$34,689 76</b>	<b>\$1,163 11</b>	<b>\$64,350 77</b>	<b>\$28,820 09</b>	<b>\$35,530 68</b>

The road operated is in length about sixty-five miles, extending from a point near Youngstown to Cleveland. At its present eastern terminus it has no connection with any other road, while at Cleveland its track at present terminates about three-fourths of a mile from the landing in the harbor, where freights are exchanged with lake craft, and also some distance from the tracks of other roads with which it is to connect and thereafter interchange through traffic. The road, therefore, being thus isolated, necessarily derives its revenue from the local resources of the region traversed and opened by its line. That these local resources—always the best that a carrying company can desire or possess—abound in kind and measure to give a most gratifying and satisfactory evidence and foretaste of promising actual and still more promising prospective results, the earnings, gross and net, in the proportions given in the foregoing statement, amply attest.

In truth, so very large did the proportion of net to gross earnings seem to us, that it was not until explanation was heard that our confidence was bestowed. The chief and conclusive point in the explanation, in brief, is in the fact that for carrying coal over their road—which has very favorable grades in the direction of the trade—the company receive

two and a half cents per ton per mile, the company furnishing only the cars and motive power for the trains; the coal operators pass the cars over the lateral roads to and from the mines and the sidings, and also unload the cars at Cleveland.

The points on the road where the coal tonnage is received are Niles, Girard and Briar Hill, distant, respectively, from Cleveland, 58, 62 and 64 miles. At and between Niles and Youngstown there are 4 or more furnaces and 2 or more rolling mills in successful operation. For the furnaces, ores are obtained in part from beds in the vicinity, and in part from the Lake Superior region, whence they are brought to Cleveland by lake, and thence to the stacks by rail, making back freight for the coal cars. These furnaces and mills, with the operations connected with their successful working, of course contribute business to the road and swell its earnings; and in and around a coal and iron region that is penetrated and opened by a railroad leading direct through cultivated lands, dotted with villages and larger towns, to a populous and prosperous shipping port, population rapidly increases and trade rapidly augments, for the reason that there exist local resources to employ numbers and local wants to be supplied from other communities that seek interchange of surplus staples. For communities that so interchange traffic, the Cleveland & Mahoning Road is the carrier; hence, with the increase of traffic, will be realized increase of earnings. And, confining our view of its prospects to its local resources and receipts at way stations, the survey is full of encouragement and promise to its owners.

Moreover, to its way-side advantages, it will, when connected at Cleveland with roads leading westward, and at New Castle with eastern outlets, become an important division in a through route to and beyond Cleveland, from cities at tidewater and elsewhere.

Altogether, then, the Cleveland & Mahoning Road combines an array of attraction, miscellaneous on the surface and mineral underground, seldom united in a single road; but, when known to exist, they are always a source of proud satisfaction alike to the originators of a road, its builders and its owners.

#### SUEZ CANAL.

The following description of this undertaking was given by D. A. Lange, Esq., of London, to a meeting of merchants and other classes in Newcastle, England, of May 28:

The canal would be 92 miles in length. It varied in width. From Suez to the Bitter Lakes, which was 12½ miles, it would be 329 feet, with a slope downwards; and it would be 210 feet at the foot of the canal. For the remainder of the distance of the canal, altogether 80 miles from the Bitter Lakes to the Mediterranean, the width would be 362 feet. It was proposed to establish an inland port at Lake Timsah, which offered great advantages for coaling, re-victualing and repairing vessels; and, as a great many coals would be required for this station, they would all understand that Newcastle would not be omitted when the time came for making those contracts. There were two jetties at the end of the canal in Pelusium Bay, in order to enable vessels to come up. The longest jetty would be 3,800 yards, and the shortest 2,700. The width between the two was 450 yards. The depth at the end of the jetties would be about 33 feet. It was considered necessary he saw, went up to the Engineer in charge of



to give it a greater depth there to make it safer when the wind blew rather heavily, although the gales were never of any consequence in that part of the Mediterranean. At Suez the jetties would not be so long; one would be 2,100 and the other 2,000 yards. The depth would be 28 feet; and, as the sea was very quiet there, this was considered quite sufficient for all purposes. From Cairo to Lake Timsah an alimentary canal was now being constructed at the expense of the Viceroy of Egypt, without which the works could not be carried on, as it supplied water for the works. It was also intended to irrigate the lands, without which, of course, the land would be perfectly valueless, and it would also carry the trade between Cairo and the canal. Cairo being the capital of Egypt, with 300,000 inhabitants, was a place which ought not to be overlooked. There was one feature of great importance with regard to the canal; it was that, with the exception of the lakes which were below, along the whole of the track the land was only five or six feet above the level of the sea, which rendered its completion much more easy than it otherwise would have been. He might tell them that there were no obstacles in the way—there were two sandbanks, but they were not movable or drifting sands as people supposed, but were firm and compact, and were overgrown with shrubs; and the entire soil through which the canal had to pass was sand, plastic clay, and clay, altogether forming a very compact substance, and one perfectly fitted for making a canal. The notion that drifting sands would be likely to silt up the canal appeared, therefore, to be perfectly erroneous. One side of the canal was lined with shrubs so thickly that camels had difficulty in finding their way through; on the other side was gravel. He thought he had now said sufficient with respect to the route which the canal would have to take. Another feature of importance was that when the canal was completed the land would be given as a grant to the company on a lease for ninety-nine years; but there was also a grant, and a very important one, made from the Viceroy of Egypt to the company. It was that of 250,000 acres of land, which, when irrigated, would be extremely productive. The alimentary canal, now making at a cost to the Viceroy of 360,000*l.*, would serve to irrigate thirty miles of land lying between Cairo and Lake Timsah. It would be thirty miles from Lake Timsah to Suez, and the remainder upwards to the Mediterranean. The land was rich in cotton, and could be made to produce almost anything. Indeed, it only required a glance at the map to see that that portion called the Delta of the Nile, which was perfectly irrigated, was quite as productive as the most fertile part of Holland, which it resembled in some measure. With regard to the capital required for the construction of the canal, it was estimated at 8,000,000*l.*, including 1,500,000*l.* for interest during the construction of the works and ulterior expenses. The capital had nearly all been reserved, and in the following proportions: for Egypt and Turkey, 2,000,000*l.*; Germany, Holland and Belgium, 1,000,000*l.*; North of Europe, 1,000,000*l.*; the United States, Spain, Portugal and Italy, 1,000,000*l.*; France, 1,500,000*l.*; and England, if she choose to join in the undertaking, had 1,500,000*l.* reserved for her. They would see from this that the raising of the capital formed the least obstacle as regarded the completion of this great undertaking. The returns that they looked to were less from sail-

ing vessels than from steamers. They had calculated in a great measure upon the rapid strides which steamers were making in proportion to the construction of sailing vessels. Although the canal would be useful for sailing vessels at certain periods of the year, still they had calculated chiefly upon screws and steamers. Sailing vessels could go through, if they chose, at the proper seasons. From April till the middle of September would be a favorable time for the outward voyage, and during the remaining part of the year for the voyage home; but some vessels, by seizing the proper season, might come and go the same way; but he thought it likely that sailing vessels going by the canal would return another way. It was, however, not an unimportant fact that, according to the Board of Trade returns in 1854, the actual tonnage of vessels registered was 4,000,000 of tons, and of steamers 300,000, equal to 13 to 1; and that in 1854 there were constructed 134,000 sailing ships and 64,000 steamers—the great disproportion of 2 to 1 being in favor of steamers. In the estimate they had taken, they had calculated on an annual increase of tonnage of 100,000 tons. It appeared, however, that this was underrated, because in 1855 the increase in our foreign exports was 322,000 tons, and in the coasting 253,000 tons. But to supply the calculations so far as the returns of the canal were concerned, he might mention that the capital being 8,000,000*l.*, the interest upon that amount at the ordinary (not the present) rate of five per cent. would be 400,000*l.* The expense of maintaining the canal would be 63,000*l.* The expense had been taken very liberally, because the North Holland Canal, which was forty-eight miles long, cost 16,000*l.* per annum for keeping up. However, instead of taking 63,000*l.*, suppose they took 400,000*l.*—as much as the interest; this with the interest made 800,000*l.* It appeared that two vessels of 2,500 tons each daily would pay the interest and wear and tear. This was very important, because it simplified the matter, and showed clearly how few vessels would be required to make this canal pay. But another feature of very great importance had lately been brought before the public, and it was one which concerned us very deeply. It appeared that our tenure in America for the supply of cotton was insecure; because, in proportion as we put down the traffic in slaves we diminished our chances of importing cotton from America. England consumed annually 900,000,000 lbs. of cotton, 700,000,000 lbs. of which was taken from America, so that we were nearly altogether dependent upon America for our supplies, and it had been felt, and very seriously felt, that such a tenure was one which ought to be altered if possible. It appeared that in India the province of Candeish contained 5,000,000 of acres of land suited to the growth of cotton, where irrigation could be easily introduced, and that this one province was capable of supplying the wants of all England put together. This fact seemed to have been sufficiently important to induce the Chamber of Commerce in Manchester to send Mr. Thomas Bazley, their President, to bring these facts before a meeting in London. The Liverpool Chamber of Commerce had not been slow to follow the example, and the matter had taken such great dimensions that, notwithstanding there was, he believed, generally a little rivalry between Liverpool and Manchester, the question was considered of such importance that this feeling was set aside; and he believed, at the present mo-

ment, they were effecting a fusion for the purpose of forming an association called the Cotton Supply Association. It was admitted on all hands that, to compete successfully with America in the supply of cotton, we wanted regular communication with India. Hitherto the communication with India had been very irregular, and this had been looked on as a great drawback. It was a great satisfaction to the projector of this undertaking to think that he should be unconsciously removing the great barrier which interposed between our trade and the trade of Europe and the East. The great difficulty which all those great bodies would experience without the opening of the canal would have been the want of regularity. The canal once open, they would be able to carry out their views with perfect success. Another feature, of no small importance, was the great alteration which appeared likely to take place in our relations with China. European interference and management in that country would no doubt bring about results which it was at present almost impossible to see—results in their nature so great that we could not at present form any conception of them. There could be no doubt that when China became a purchasing country, as well as a selling country, we should have a difficulty in supplying the wants of all. Last year we imported from China goods to the value of about 9,000,000*l.* We exported in British manufactures to China, including Hong Kong, only 2,000,000*l.*; therefore, we took 7,000,000*l.* per annum of goods more from them than we sent. But, if the tables should afterwards change, we should really find great difficulty in supplying the great demand from China, were it not that attention had been so fortunately drawn to this new province of Candeish, which would no doubt enable us to supply the wants of that very vast empire. But when we looked at the returns of the undertaking, and considered that this great province was situated just at that part where the canal would effect the greatest shortening of the route, viz: a shortening of 7,000 miles, the distance by the Cape of Good Hope being 14,000 miles to Candeish, it was highly important, and would, of course, create an enormous traffic through the canal—a traffic upon which we had never calculated; and, therefore, when gentlemen asked how they were going to make the canal pay, they could fully show that it would pay a very good dividend as the matter stood at present; but that it would pay a dividend much better than they ever anticipated when they came to see such a great development as was about to take place in China and in India. Also, with regard to the Australian trade, it would be a very great boon. Complaints were continually arriving from Australia of the want of regularity in our shipments. Goods were sent to be used in summer and arrived in the winter, and the reverse; and storage was so heavy that they did not admit of being warehoused, and therefore they were sold at any cost; hence they saw the fatal results which were continually arising from this want of regularity. They hoped the canal would remove all these difficulties, and would confer a benefit and a boon upon the commerce not only of England but of the world generally. He thought he had said enough upon the subject, and for the present preferred having questions put, and answer some of the remarks that might be made by those who were much better able to judge of the advantages likely to accrue to commerce from this undertaking than he was himself.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int. St.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot. of Bonds.	Name of Company.	Quot. of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al xndria, Lon. & Hamp'sr	.....	173	5,000,000.00				
498,800	6			1862-3	2d "	.....	Androskog'n & Kennebec	.....	54.55	1,400,000.00		209,473.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	199,000.00	271,122.74	173,750.74	4 pr. ct. 6m
52,646	0			1860	"	.....	B'ng'r, Old T. & Milford...	.....	12.5	135,700.00	52,646.26	39,104.40	2,671.61	15,000 in 153
500,000	7		N. Y.	1865	1st mortgage.	.....	Boston & Worcester...	.....	44 5-8	4,500,000.00	500,000.00	1,102,751.90	437,062.03	18000 4.6m
300,000	7			1857-9-62	Income.	.....	Buffalo & State Line...	.....		1,300,000.00				5 pr. ct. 6m.
200,000	7			1864	Domestic.	.....	"	.....						
577,187	6			1872	4th mortgage.	30	Central Ohio...	.....						
192,200	7			1874	1st mortgage.	.....	Champl'n & St. Lawrence	.....	43	1,872,800.00	1,001,087.00	165,200.00	77,700.00	10 per ct.
380,000	7				Domestic.	.....	Ch'r'l'te & South Carolina...	.....	110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
1,440,000	6-7-8		N. Y.	1864-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy...	.....	133	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,300,000	8			1868-76	Convertible.	.....	"	.....						
374,000					1st mortgage.	.....	Chicago, Fulton & Iowa...	.....	5	1,761,149.16	2,241,500.00	221,491.96		
1,300,000					2d "	.....	Cin. Wil'ng'n & Zanesville	.....	25					
532,000					3d "	.....	"	.....						
104,000					Income.	.....	"	.....						
305,500					Convertible.	.....	Cleveland Col. & Cin.	103 1/2	139	4,741,220		1 3,754	700,204	6 per cent.
540,000	6			1873	1st mortgage.	.....	Cleveland & Mahoning...	.....	85	1,500,000.00				
43,000	7			1864	2d "	.....	Cumberland Valley...	.....	52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
400,000	7			1873	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00			
500,010	5			1857-8-9	1st mortgage.	.....	Eastern Railroad...	98 6-10	130	3,345,000.00		665,578.79	228,077.84	\$234,133
350,000	7				1st mortgage.	.....	East Ten. & Virginia...	.....	130	625,450.00		30,597.50	19,692.30	
740,000	10			1869	1st "	.....	Essex Railroad...	.....	20	700,000.00				
88,000	10			1861	2d "	.....	Evansville & Crawf'dale	.....	109	2,228,657.50		243,970.42	150,061.90	\$133,221.45
400,000	7			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....		3,540,000.00		621,102.52	213,237.81	3 per cent.
200,000	10				1st mortgage.	.....	Fox River Valley...	.....	33	800,000.00				
100,000	6				1st mortgage.	.....	Fair Haven Branch...	.....	15	300,000.00		50,321.33	14,822.45	\$166,240.00
100,000	6				1st "	.....	Georgia R.R. & Banking Co.	.....	233	4,136,000.00		1,068,202.54	357,659.42	\$166,240.00
300,000	7				1st "	.....	G't Falls & Conway R.R.	.....	20			27,376.69	14,207.07	
4,000,000	6 1-9			1858	1st "	.....	G't West'n R.R. of Can.	28 1/2	4	4,191,550.00		2,068,636.00		8 pr. ct.
2,000,000	7			1869-70	1st "	97 1/2	Housatonic Railroad...	.....	74	2,000,000.00		339,196.50	176,529.98	
1,812,000	7			1860	2d "	81	Hudson River...	.....	21	4,000,000.00		1,924,322.44	728,037.40	
12,885,000	7			1875	3d mortgage.	58	"	.....	144	4,000,000.00				
4,115,000	5			1876	1st "	95	Illinois Central R. R.	124	704	18,453,376.00		1,476,035.27	1037,949.08	7 pr. ct.
3,000,000	7			1860	Freeland.	61 1/2	"	.....	704	3,558,376.00				
600,000	7	Nov. 1.			1st mortgage.	50	Indiana Central...	.....	48	72 4-		351,871.00		3 pr. ct.
700,000	7	Jan. & July 1			2d "	.....	"	.....						
50,000	7			1862	1st "	.....	Iron R. R.	.....	13	123,700.00				
700,000	7				1st mortgage.	.....	Kentucky Cen. 2d Div.	.....		719,500.00				
					1st "	.....	Knoxville & Kentucky...	.....	32	166,000.00		23,233.59	14,233.59	
218,000	7				1st "	.....	Laurens (S. C.) R. R.	.....	184			50,224.71	14,149.13	\$8,000
1,000,000	7			1866	2d "	.....	Louisville & Nashville...	.....	12 3/4	300,000.00		587,236.57		10 pr. ct.
1,000,000	7			1875	2d "	.....	Lowell & Lawrence...	.....		2,697,090.00			162,277.50	
2,000,000	6				1st "	.....	Mad River & Lake Erie...	.....		2,697,090.00				
2,500,000	7			1868	1st "	50	Manchester & Lawrence...	.....	26	1,000,000.00				\$24,000
2,000,000	7			1874	2d "	.....	Marietta & Cincinnati...	19 1/2						
60,000	7 and 8			1867	1st "	.....	Mexican Gulf R. R.	.....	27					
420,000	8				1st mortgage.	.....	Milwaukee & Horicon...	.....	30					
329,000	8			1881	1st "	.....	Mineral Point R. R.	.....	32					
320,000	8			1-68	2d "	.....	"	.....	32					
6,000,000	6			1884	1st "	.....	Mobile & Ohio...	.....	497	10,000,000.00		253,498.95	162,202.24	7 pr. ct.
500,000	7			1869	1st mortgage.	.....	Nashua & Lowell R. R.	.....	15	600,000.00		193,752.42	55,501.74	2 pr. ct.
2,356,000	7	May & Nov.	N. York		1st "	.....	New Haven & Northm'tn	.....	55	922,500.00				3 pr. ct. 6m
8,892,600	6	June & Dec.	N. York	1864	Con. thl 1859.	99	New York Central...	81 1/2	555	23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
3,000,000	7			1873	1st mortgage.	79	N. Y. & Harlem R. R.	9 1/2	133	5,717,100.00		1,040,293.26	64,678.71	\$37,692.30
936,000	7			1864	2d "	.....	" Pref.	25		1,58,000.00		245,713.00	51,544.40	
411,700	6			1863	1st "	.....	N. Y. Prov. & Boston...	.....	66	1,700,000.00		120,571.50		\$25,000
500,000	7				2d "	.....	N. Lon., William's & Pal.	.....						
300,000	6				1st "	.....	Pontchartrain R. R.	.....	5	500,000.00				
					1st "	.....	N. O., Opelousa & Gr. t. West.	.....	62 1/2	6,000,000.00		116,795.00	366,118.80	7 pr. ct.
1,500,000	6			1873	1st mortgage.	.....	N. Y. & New Haven...	.....	103 1/2	3,000,000.00		1,007,666.48		2 pr. ct. 6m
1,000,000	0			1873	2d "	.....	North Western Va. R. R.	.....						
2,000,000	6			1-85	3d "	.....	"	.....						
1,500,000	7			1859	1st mortgage.	.....	Northern (N. Y.) R. R.	.....	118	2,000,000.00		600,000.00		7 pr. ct.
3,000,000	5				1st "	.....	North Missouri R. R.	.....	19 1/2			25,176.74	88,458.56	2 1/2 pr. ct.
419,300	6			1877	1st moq.	.....	Norwich & Worcester RR	.....	60	2,111,500.00		304,236.33		
221,800	6			1860	"	.....	Ogd'nsh'g. Clayt'n & Rome	.....	94			259,690.10	137,875.93	5 pr. ct.
					1st mortgage.	.....	Ontario, Simcoe & Huron	.....	88 3/4	2,957,500.00		276,539.02		
400,000	6			1866	2d mortgage.	.....	Orange & Alexandria R.R.	.....	47	1,500,000.00				6 pr. ct.
1,200,000	0			1875	1st "	.....	Peoria & Bureau Val. R. R.	.....						
300,000	7			1861	1st mortgage.	.....	Philadelphia & Trenton...	.....	28 1-5	1,000,000.00				
300,000	8			1864 to 1874	1st "	.....	Portsmouth & Concord...	.....	76	2,000,000.00				
1,260,000	6			20 years.	1st mortgage.	.....	Potsdam & Watertown...	.....	62 1/2	950,000.00		68,525.42		
					1st mortgage.	.....	Rutland & Washington...	.....	86	6,000,000.00				
500,000	6				1st "	.....	St. Louis & Iron Moun. R.R.	.....	168 3/4	400,000.00				
250,000	6				2d "	.....	Salem & St. Louis R. R.	.....	116				19,050.64	
					1st "	.....	Snd'sky Mans'Pd & New'k	.....	26	500,000.00		75,246.06		
					2d "	.....	Sullivan Railroad...	.....					17,378.08	
317,000					1st mortgage.	.....	Tennessee & Alabama...	.....	145			39,586.44		11m. 12 pr. ct.
300,000				1861	1st mortgage.	.....	Terre Haute & Richmond	.....	73	1,291,450.00				
198,000				1840	2d "	.....	Toledo, Wabash & Western	.....	242	1,000,000.00				
202,300				1875	3d "	.....	Troy & Boston...	.....						
					1st, 2d, 3d "	.....	Vicksburg & Jackson...	.....	215	3,000,000.00		322,048.60		2 pr. ct.
2,500,000					1st mortgage.	.....	Westchester (Pa.) R. R.	.....	31	165,000.00				
590,000	7				2d "	.....	Wilmington & Manchester	.....	171					
200,000	7				"	.....	Winchester & Potomac...	.....	32					
					"	.....	Worcester & Nashua...	45 09						



# LONDON QUOTATIONS OF AMERICAN STOCKS AND BONDS.

June 11th, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1855, ..	—	80
Cin. Ham & Dayton, 2d mort., ..	—	80
Detroit & Milwaukee, 1st mort., conv. till ..	—	64
1865, ..	—	66
Erie, 3d Mortgage, 1883, ..	—	82
" Sinking Fund, ..	—	81
conv. 1862 ..	—	76
Grand Trunk (Canada) Debenture, ..	90 ½	9 ½
Great Western " conv., ..	110	114
" " non-conv., ..	106	108
Illinois Central, 1st Mort., 7s, ..	90	91
" " with option 70 per cent. ..	—	—
shares till Jan. 1858, ..	107	109
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. ..	—	86
Cent., ..	—	88
Little Miami 1st Mort. not conv. 6s, ..	—	—
Marietta and Cincinnati, 1st Mort., ..	—	—
Michigan Central, conv., 8s, 1860, ..	90	91
do do do 1869, ..	79	80
N.York Central. No Mort. Not conv., 6s ..	89	91
" conv., 7s, ..	—	—
Ohio and Mississippi, 1st Mort., ..	—	—
Ohio and Pennsylvania, Income 1872, ..	68	70
Panama. No mort. conv. 1866, ..	—	—
Pennsylvania, 1st Mort., conv., ..	89 ½	90 ½
" " Sterling, 2d Mort., ..	91	93
Stenberville and Ind., 2d Mort., ..	—	—

The quotations given are sterling quotations. The American values to be obtained by adding on exchange generally about 10 per cent.

## CINCINNATI STOCK SALES, AT THE STOCK BOARD, MERCHANTS' EXCHANGE AND AT PRIVATE SALE. BY HEWSON & HOLMES.

For the week ending July 1, 1857.

BONDS.

Little Miami R. R. Co. 6 per cent. 1st Mortgage ..	80
Cincinnati, Hamilton & Dayton R. R. Co. 7 per cent. ..	80
1st Mortgage Bonds, ..	80
Do. 2d do ..	82 ½ to 83
Covington & Lexington R. R. Co. 6 per cent. 1st ..	68
Mortgage Bonds, ..	68
Do. do 7 per cent. 2d Mortgage, ..	67
Indianapolis & Cincinnati R. R. Co. 7 per cent. 2d ..	80
Mortgage Bonds, ..	80
Ohio & Mississippi R. R. Co. 7 per cent. 2d Mortgage ..	60
Bonds, ..	60
Hillsborough & Cincinnati R. R. Co. 7 per cent. 1st ..	53
Mortgage Bonds, ..	53
Covington & Lexington R. R. Co. 10 per cent. In- ..	65
come Bonds, ..	65
Indiana Central R. R. Co. 10 per cent. Income Bonds ..	95
Marietta & Cincinnati R. R. Co. 7 per cent. Domes- ..	35
tic Bonds, ..	35
Columbus & Xenia R. R. Co. 7 per cent. Dividend ..	85
Bonds, due 1866, ..	81 to 82
Little Miami R. R. Co. Dividend Scrip., ..	115
Cin., Ham. & Dayton do do do, int., ..	70
Indianapolis & Cin. do do do ..	82
Cincinnati 6s of 1854, ..	82

STOCKS.

Little Miami R. R. Co., ..	90
Columbus & Xenia, ..	90
Cin., Hamilton & Dayton, ..	68
Indianapolis & Cin., ..	62
Indiana Central, ..	50
Covington & Lexington, ..	18
Marietta & Cincinnati, ..	18 ½
Hillsborough & Cincinnati, ..	18 ½
Mad River & Lake Erie, ..	12 ½
Ohio & Miss., ..	11 ½ to 12
Junction (Ind.), ..	8
Cincinnati & Chicago, ..	2 ½
Southern Pacific, ..	\$3 00 for \$5 00 paid.
do do do, ..	15 for 3 00
Farmers' Bank of Ky., ..	120
Ohio Life Ins. & Trust Co. Bank, ..	100

## MONETARY AND COMMERCIAL.

Yesterday was one of the great settlement days of the year. In consequence of this, there has been a greater demand for money than during the past month. And parties have paid high rates. Parties in good standing, however, have experienced no difficulty in providing all the means they really need at the usual rates. Tomorrow being Friday and the third of the month, will be a busy day as it will involve the payments of the succeeding two days. We quote rates of interest in the regular houses at 10 to 12 per cent; outside rates at 15 to 24 per cent.

Eastern exchange here has ruled for sometime at ½ to ¾ premium. In the early part of the week we

we note considerable activity, but this has quieted and the demand is about equal to the supply at present prices.

In New York we notice a satisfactory state of things. The treasure list of the last arrival from California reached \$1,852,868, with some considerable in the hands of passengers.

The war in the stock market which has favored the bears for a long time, is likely to turn in favor of the bulls. Out of 100,000 shares of Erie stock, but about 7,000 are held by the brokers.

The treasurer of the Michigan Southern Railroad has resigned. This will have a tendency to restore harmony in the Board, and will probably operate favorably on the stock.

We subjoin our usual quotations from Hewson and Holmes stock circular:

The general aspect of the stock market in the past week was somewhat better, though still greatly depressed. Transactions are made with very great caution, and are mainly confined to our leading staple securities; of this class we know of no lots that are pressing the market, and to the confidence and ability of holders to carry them, may be attributed, in a very great degree, the stability of prices.

The present seasonable weather, and the very encouraging accounts of the coming harvest of hay, wheat, rye, oats and barley, which reach us from all sections of the country, are causing all departments of trade to look forward to the future with hope and confidence that we are on the eve of a more comfortable state of things, not alone as regards the daily expenses of living, but to its beneficial effects upon finance and business. The freighting business of all Western roads will be largely increased over any previous season, and their earnings must be such as to give more confidence and a higher value to the securities of all the great Western lines. That there should be at this time a very decided falling off in the earnings of Western roads is a natural and necessary consequence of the exhausted condition of the country, caused by the deficient harvest of last year and the extreme cold of the winter and the backwardness of the spring. These difficulties are now, however, soon to be speedily removed by crops rich and prolific beyond precedent, and which will tax the rolling stock of our roads to their utmost capacity. Already samples of barley and wheat are beginning to make their appearance in our market from Kentucky and Southern Illinois, and next week the harvest will commence in this State and Indiana.

There have been sales of Little Miami shares at 90, and Columbus & Xenia at the same rate; the demand at this price is very moderate. Hamilton & Dayton shares go slowly at 68, with very little offering. Indianapolis & Cincinnati we quote at 62, at which we note one small sale. In the fancies the transactions have been more than usually limited; the few sales that have taken place have been within the range of our figures.

In Bonds we note small sales of Little Miami 6 per cent. at 80; Hamilton & Dayton 7s. 1st mortg., at 90, and 2d mortg.'s at 82 ½ to 83; Indianapolis & Cincinnati 2d mortg. 7s at 80; Ohio & Mississippi 2d mortg. 7s at 60; Covington & Lexington Incomes, 10 per cent., at 65.

The money market, through the past week,

though exceedingly stringent, has, on the whole, worked easier than the two weeks previous, and after the payments of the first and fourth, which various causes have conspired to make very heavy, are safely passed, we look for a gradual decrease in the demand for money, and less difficulty in placing good paper.

Exchange on New York, after a slight advance in the early part of the week, caused by a heavy demand, has again settled to ½ to ¾ premium, and is quiet at these figures. New Orleans exchange dull at ½ per cent. discount.

SALES AT THE NEW YORK STOCK BOARD—June 29.

\$4,000 Indiana State 5s, ..	81
2,000 Tenn. State 6s, '90, ..	87 ½
1,000 Missouri State 6s, ..	81 ½
2,000 California State 7s, 1870, ..	61
6,000 N. Y. Central R. R. 6s, ..	84
1,000 Michigan S. S. F. Bonds, ..	60
7,000 Illinois Central R. R. Bonds, ..	96
1,000 N. Y. Cent. R. R., ..	77
300 Erie Railroad, ..	26 ½
150 Cleve. & Pitts. R. R., ..	34
500 Reading R. R., ..	68 ½
300 Mich. S. & N. Ind. R. R., ..	39
350 Mich. C. R., ..	80 ½
100 Galena & Chicago R. R., ..	66
10 Chicago & Rock Island R. R., ..	85
190 Mil. & Wis. R. R., ..	49
5 LaCrosse & Milwaukee R. R., ..	50
50 Cleve., Col. & Cin. R. R., ..	92 ½

—BUFFALO AND PITTSBURGH R. R.—The portion of this road from Tunawau switch on the New York and Erie Railroad, to the Lafayette coal beds is under progress.

## NORMAN HOUSE AND PARK.

From the Cincinnati.

A pamphlet with the above title has been recently published, and has been favorably received by the press and the people. In stating the plan and the prospects of the Norman Company, many suggestions are made interesting to the general reader and to men of business. The frontispiece, the same as the one in this number of the CINCINNATUS, represents faithfully the intended House and Park, which are to be a little more than half a mile south west of our College, and about a mile north west of Cumminsville.

The proposed Park is to contain eighty acres—to be purchased and improved by a company—to have a Vegetable garden, Chicken-yard, Orchard, Vineyard, Dairy, Fish-pond, Baths, Observatory, Promenades, etc. The house—160 feet front by 180 deep, to be of stone and of Norman style. Stock \$25 per share, and the whole cost of the land and all the improvements including the house, \$150,000. In addition to its other attractions, this Park is recommended by its beautiful scenery, and most salubrious atmosphere.

The plan of the Norman Company is that no payment shall be required, until Twenty-four thousand dollars shall have been subscribed; the money first collected is to be applied to paying for the lands securing to the company a perfect unincumbered title; the next, to making such improvements as are certain to be profitable, as putting out fruit trees, grape vines, etc., and whatever is done, is to be upon the cash system. As no debt is to be contracted beyond the means of the company immediately available at the time of making the contract, sacrifices of property will be avoided; and as the land is to be purchased at its present cash value, no loss can be reasonably apprehended.

Persons who wish to make investments, or who wish to reside in the country, but near the city, during the summer, are particularly interested in this enterprise. For the pamphlet,



and for full information, inquire of J. T. CRAPSKY, N. W. cor. of Walnut and Sixth streets, Cincinnati.

Translated from the Daily Volksblatt.

It is with pleasure we direct the attention of our readers to a pamphlet bearing the above title, which gives a clear and well-digested statement of the plan and prospects of the Norman company, a name, which, we trust, will become familiar to every German, when the great and popular work the company propose, shall have been completed. The pamphlet is illustrated by a cromolithograph, by our fellow countrymen, EHRCOTT & FIESSRIGER—of the great hotel, and the beautiful surrounding scenery. Nature, Art and Taste will combine to make Norman House and Park one of the most delightful places in the west, and it cannot fail to become the favorite resort of those of our citizens who are wise enough not to seek in distant parts, for what they can have in their own neighborhood. The plan is a good one and the public should unite in giving it their zealous support. Its completion will contribute to the health and enjoyment of all classes, and especially of those who are confined during most of the year in offices, counting-rooms, or factories, and whose means and avocation do not allow them to pass the summer months in the overcrowded resorts of this country. A sojourn of a few weeks at such a place as Norman House and Park, would undoubtedly restore and strengthen the health of an overtaxed mind and body.

We recommend to our readers the perusal of the pamphlet, as our limited space prevents our giving the very interesting details it contains.

Cincinnati is a great and rising town. It has many streets which are sometimes covered with mud—in dry weather with dust. Some of its alleys are mere pools, and disagreeable odors pervade the city, betraying the influences which are at work destroying the general health. We see the consequences every day. The mortality among children is great; and if you see our lean, narrow-shouldered, spindle-legged, milk-faced young gentlemen, you should not suppose they were chips of the old blocks, which conquered the wilderness, and made Cincinnati the Queen of the West.

It is elbow room which we want—places where our children can breathe and enjoy the air of the country, where they can see Nature in her glory, where all persons observing the proprieties of life, of whatever nationality, may congregate and associate, leaving prejudices and pretensions in the wilderness of the city. The grounds around the Norman House would be just the place for pic-nics, glee-clubs and musical feasts; and the House, if well conducted, must be equally for the benefit of the public and the proprietors. Our best wishes are for the undertaking, which was planned by industrious and enterprising natives for the benefit of all.

#### SHAREHOLDERS' DUTY.

A Proprietor of railway stock rarely brings it home to himself that it is his duty to be well acquainted with the affairs of his Company, to know, amongst other things, that the accounts which every half year he formally approves, are proper and correct. It may be here said that he ascertains the correctness of the accounts through the auditors, whom he, in common with other Shareholders appoints. He cannot, we admit, on all occasions audit the accounts himself in order to ascertain their correctness, but he may attentively read and thoroughly understand the accounts presented for his approbation, and object to items that are clearly improper charges. He may inform him-

self of all the measures with which his Directors propose, and express his opinion on them. He may attend meetings or read the reports of them and what is written thereon, and communicate his views to the Directors. He need not, and he should not, leave the affairs of the Company entirely and exclusively, for years, in the hands of a few others.

The opinion of a judge of the Court of Chancery has this week been given on a question bearing on the subject of Shareholders' neglect of duty, from which it is evident that Chancery holds railway Shareholders in their corporate capacity responsible for their acts of commission and omission, whatever Shareholders themselves may think on the point. The case to which we refer is the Newry and Enniskillen Railway Company v. Spackman, before V. C. Sir John Stuart, on the 2nd inst. We find that case thus reported—

"THE NEWRY AND ENNISKILLEN RAILWAY COMPANY V. SPACKMAN.

"*This was a suit by the Company against Mr. Spackman, as Chairman and a Director of the Company, seeking to open accounts that had been settled and audited and allowed, and charging him with various breaches of duty, and also seeking a general account against him.*

"*It appeared that in 1849 Mr. Spackman was appointed a Director of the Company, and in 1850 he was elected Chairman, and he occupied both offices until he resigned in October, 1855. During this period he had been actively engaged for the Company. This was a bill seeking to open all the accounts, and to charge him with breaches of trust, in paying commissions to himself upon the payments made by him, and also for profits made by him in the purchase of the Company's stock, and the resale thereof at a large profit. The bill prayed for an account of the sums received and paid by the defendant, and that he might account to the Company for all such profits as he had made. It appeared that all the accounts had been duly audited up to February, 1855, and passed both by the Directors and Shareholders; but as to the accounts subsequent to that period, his accounts had neither been audited nor passed.*

"*The Vice-Chancellor said the bill contained various charges of misconduct against the defendant, none of which had been proved, and in particular one of these charges was that he had purchased forfeited shares with the Company's money—this was not proved. It had also been charged against him that as a Director it was not competent in him to purchase any forfeited shares, and again it was said that he could not charge a commission. But considering that the accounts had been duly audited and passed by the Shareholders, he thought the accounts ought not to be opened. The Shareholders had an opportunity of investigating these accounts, and as it was owing their carelessness if they were improperly passed, he thought they ought not to be opened. With reference to the accounts subsequent to Feb., 1855, they must be taken with just allowances in respect of extraordinary services, on the footing on which such allowances had been made on taking the previous accounts. The bill must be dismissed with costs as to so much thereof as sought to open the accounts prior to Feb., 1855, and the further consideration and costs beyond those now given to the defendant must be adjourned.*

Thus, if Shareholders pass accounts it is not open to them afterwards to say, "Oh, we

did it carelessly—it suits our book at this moment to object to some of the items in those accounts, and now we do object." Chancery will reply—"No accounts which you yourselves have approved, you shall not afterwards object to; and if you did not observe improprieties when the opportunity for observation and investigation was afforded you, that is your fault."

We notice this matter in order to warn Shareholders in railway Companies generally of their position; what Chancery thinks, and how it will act in the matter of neglect of duty. They are two apt to consider that it matters little to their interests whether they do their duty or not, believing, as they evidently do, that the dividend will be the same in either case. On occasions, however, they find out their mistake. If a Director charge a commission, or make any other charge in the accounts, and the Shareholders ignorantly or carelessly approve them, they cannot reopen them to object to the charge, if it be objectionable. No. They approved at the time of the accounts containing the charge; they passed them, possibly with votes of thanks and implicit confidence, and they must abide the consequences. If it were otherwise, inattention and carelessness in business would be at a premium; the idle and ignorant in place of the active and well-informed would reap reward.—*Herapath's Journal.*

#### DAMAGES FOR INJURIES BY THE LONGUEUIL EXPLOSION.

The Montreal Commercial Advertiser of June 12th, gives the following synopsis of one of the cases of the judicial controversy resulting from the explosion of the steam ferry boat of the Grand Trunk Railroad Company, some time ago.

In the Superior Court yesterday, before Mr. Justice Mondelet and a special Jury, was tried the case of CHARLES HEAPE vs. THE GRAND TRUNK RAILWAY COMPANY; one of the cases arising out of the Longueuil Explosion.

The Plaintiff is a Cotton Manufacturer at Manchester in England, was on board the Grand Trunk Ferry Boat at the time of the explosion, and suffered injuries to person and property, for which and incidental expenses this action was brought. The Plaintiff claimed £500; the Defendants had once made an offer of £250, finally reduced to £75. The injuries received by Plaintiff were some scalds on the head, bruising of one leg, and a partial dislocation of ankle weakened by previous injury. He claimed also £100 for injuries to clothing; his hotel and doctor's bill, while detained in Montreal on account of the accident, £41 5s.

Among the witnesses called for the Plaintiff was Mr. C. Robertson, whom the Jury of inquest were so anxious to have before them, but whose condition prevented him from being examined at that time.

Mr. Robertson, a Brother of the Messrs. Robertson, Advocates of this city, testified that when he went on board the Grand Trunk Ferry Boat at Longueuil, it was vibrating extremely; that in passing between the engines he heard one engineer say to the other:—"There is too much steam on, had we not better blow off? To which the other engineer replied;—"No! we are late to-day, we must hold on to get to the wharf in time."

Mr. Robertson from this conversation and other indications of excessive pressure which



the Engine nearest the shore, (Shand) and said to him;—"Have you not too much steam on? "Go to Hell," said the Engineer. Mr. Robertson retorted;—"I would rather not go there; but I fear that many will do so if you are not more careful." This engineer then moved a crank, and the whole boat seemed to be lifted up and down; and Mr. Robertson expecting an explosion ran to the end of the boat; in an instant the boilers burst.

The Defence brought no evidence; Mr. Rose on part of the Company stated that out of upwards of sixty cases arising out of the explosion, this and another were the only ones which had been made the subject of legal proceedings; these would have been settled as the rest, but that the claims were exorbitant and such as the Company in the public interest felt bound to resist. The Company admitted its liability; but it contended that the Plaintiff had made out no loss equal to that claimed.

The Jury after retiring for a short time brought in a verdict for the Plaintiff for £125; half what the Company offered to pay a year ago.

#### BUFFALO RAILROAD CONVENTION.

The Buffalo Commercial Advertiser gives the following statement of the cause and results of the late convention of railroad officials in that city:

As near as we can ascertain the *casus belli* between the Buffalo & Erie and New York & Erie Railroads, the circumstances are such as to make the difficulty prolonged. At the Railroad Convention, held on the 20th of May last, regular rates of fare were agreed upon from Buffalo to New York. Whether Dunkirk was included in that arrangement, is the matter in dispute. To compete with the Central, the Erie Road puts the fare from Dunkirk to New York at \$5, leaving the fare from Buffalo at the old rates.

The State Line Road objects to this, inasmuch as it subtracts very largely from it eastward travel, passengers leaving at Dunkirk instead of coming to Buffalo. To remedy this it took very decided measures. It refuses to recognize the coupons over the State Line Road from Erie to Dunkirk, so that a passenger buying through tickets from Chicago to New York, via Dunkirk, finds himself compelled to pay an additional fare from Erie to Dunkirk. (We make this statement on the authority of the Cleveland Herald.)

A Railroad Convention met here on Wednesday evening to decide the matter. It sustained the State Line Road in the position that the action of the New York & Erie was in violation of the action of the convention of the 20th of May last. At this latter convention the New York & Erie Road was not represented. The following resolutions were passed:

**Resolved**, That if any railroad company shall refuse to accede to the regular rates of first class passenger fare which were charged on the 20th of May last, or shall knowingly, directly or indirectly, violate the same by payment or commission, or allowance of drawback, or otherwise, either on its own line, or by forming part of and working with a through line that may be violating them, all other companies interested therein shall refuse to receive or sell through tickets over or from the road of the offending party while such violation continues, nor shall such roads so interested check baggage over the road of the offending party, or permit it to be checked

upon their premises, or otherwise, with checks that they can control.

**Resolved**, That if any company shall refuse to conform to the above resolution, and shall continue in any respect, contrary to said resolution, to do such business with any offending company, all other companies shall in like manner, as provided in said resolution, refuse to do business with the company so maintaining its connections with the offending party.

**Resolved**, That the interest of the public and of the stockholders of all our Railroads require an immediate discontinuance of all outside expenditures by the companies to get business away from each other.

**ANOTHER ASIATIC RAILWAY.**—We observe among other novelties in our last European files, that a Company has been organized in London, with a capital of £1,200,000, for the construction of a railway from Smyrna to Aidin, a distance of seventy miles, which will bring the two cities within three hours of each other, instead of four days, as at present. The imports and exports of Smyrna amounted in 1856 to \$25,000,000. That city contains 160,000 people, and Aidin 60,000, the latter being a converging point for much of the inland traffic of that part of Asia Minor, on its way to the seaboard. At present 10,000 camels are employed, at a cost of £400,000 a year, to convey produce and merchandise between the two places. When the projected railway is completed, all this animal activity will disappear. The Turkish Government has granted a concession (charter) for the projected railroad, takes 15,000 shares, and guarantees a dividend of six per cent. It is more than probable that the creative influence of the iron horse will restore the more cultivateable regions of Asia Minor, now almost a wilderness, to the fertility, prosperity, traffic, and population which distinguished that portion of the world in the latter days of the Roman Republic, and during the reigns of the earlier Cæsars. Alas! the bygone greatness of Asia Minor is now only attested by the ruins of cities and temples almost innumerable. The agricultural elements and resources are vast, in tobacco, figs, cotton, poppies, the mulberry for silkworms, wheat, maize, barley, beans, flax, hemp, seeds, drugs, dye-stuffs, wool, honey and wax. One of the best features of the speculation is, that there are coal mines at no great distance. Thus are many of the nations of the earth, that had long passed away, about to be resuscitated by the magical agency of steam!

#### J. T. CRAPSEY, ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

#### The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty. The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
Aug 14-ly President of the Board.



N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

#### Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

#### Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

#### LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jr. 27.

RICHARD NORRIS & SON.

#### IRON BOILER FLUES PASCAL IRON WORKS.

#### MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA. [eug]

#### RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.]

J. H. GOODMAN & CO.,  
no. 7 Wall st., N.

#### RAILROAD CAR AND

#### COACH TRIMMINGS. DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

#### IMPORTERS

OF  
Plain and Figured Mohair Plush  
Printed & Tinted do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars  
ROPE MATTING, Every Width  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVAS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

#### PATENT FELT.

FOR CUSHION & MATTRASS FILLING

N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON

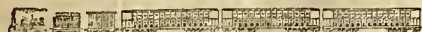
W. G. ATKINSON,  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological maps prepared.



## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Sup't.  
Racine, May 15, 1857.

## Harlan & Hollingsworth, WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

### ENGRAVERS AND PRINTERS.

Isso, engraved in a style corresponding in excellence with that of Bank Notes—

### RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS, afte, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Seals, &c., &c.

Constantly on hand, Bank Note Paper, made to order a superior quality.

GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.

## E. MENDENHALL, MAP, BOOK & PRINT SELLER,

Has constantly on hand  
GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, AND OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,  
Geological and Astronomical Charts, Globes,  
MICROSCOPES, TELESCOPES  
DRAWING INSTRUMENTS, &c.

Publisher of the  
Railway Map of the Western States,  
In Sheet or in Pocket Case;  
The LARGE SECTIONAL and RAILWAY MAP of OHIO  
the LARGE MAPS of CINCINNATI, and HAMILTON CO.  
Ohio, and the TOWNSHIP MAPS of INDIANA and IOWA  
MAPS OF EVERY DESCRIPTION.  
mh22

## RAILROAD RECORD, BOOK & JOB PRINTING OFFICE, 167 WALNUT STREET,

Between Fourth and Fifth Sts., Cincinnati.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,  
THEODORE DEHON,  
no13 10 Wall st., near Broadway, New York.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the **Ohio and Mississippi Railroad**. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trips. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan-ry] Agent.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

### Machinery and Machinists' Tools,

Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
diesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,  
CAR FINDINGS,  
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED. oc23-ly

### ENGINEERING!!

The undersigned is prepared to furnish  
SPECIFICATIONS, ESTIMATES, AND PLANS,  
In general or detail of all kinds of  
Steam Vessels, Engines, Boilers, Mill Work, &c.  
Particular attention given to the superintending of  
LOCOMOTIVES, TENDERS, CARS,  
And Railway Machinery of every Description,  
While under construction.

AGENT FOR THE PURCHASE of, on commission  
all articles required for Railroads, Steam Vessels, Loco-  
motives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES  
METALLIC SELF-ADJUSTING CONICAL PACK-  
ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles  
CHAS. W. COPELAND,  
Consulting Engineer,  
64 Broadway, N. Y.

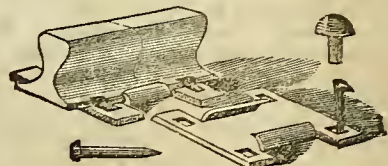
## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pat-  
tern. 52 to 59 lbs. per lineal yard, now at New  
Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
feb19-1m 9 South William street, N. Y.

### GREAT WESTERN

## Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the  
country, for which we hold the exclusive right,  
and are prepared to manufacture to any extent, and on  
the most favorable terms, any pattern of Wrought  
Chairs, Hook and Flat head Railroad  
Spikes of all patterns, Boiler Rivets, Bolts  
of all sizes for Bridge Work, Ship and Boat Spikes, &c.  
&c. The best quality of iron is used in all articles of  
our Manufacture. All orders promptly filled. Works  
No. 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.

feb 25 CORBY, GOSSIN & CO.

## SILVER, GOLD, LEAD,

And Other Minerals,

ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TUCAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this contin-  
ent, at the present time, is probably the SONORA  
EXPLORING AND MINING CO., of Cincinnati, Ohio, or-  
ganized March, 1856, by gentlemen of character, experi-  
ence and familiarity with that country, to explore and  
purchase good Spanish Titles to the most important  
Mineral Lands of the richest portion of Sonora, brought  
within the limits of the United States by the Gadsden  
Purchase.

The company is now prepared to report the greatest  
success, having acquired the celebrated Rancho of Ari-  
vacas, containing upwards of 17,000 acres of land, by per-  
fect title, with at least twenty-five known Silver Mines  
thereupon, reported to be very productive. They are  
also in possession of twenty-four other veins on another  
tract, and are negotiating for some 200,000 acres of simi-  
lar lands in the immediate vicinity, valuable not only  
for their immense mineral wealth, but also for their  
abundant wood, water, grass, &c., and their healthy  
and superior climate.

Four companies of United States Dragoons are located  
on one of the tracts, thus affording ample protection  
from the depredations of the Apache Indians, the sole  
cause for the past century of the depopulation of this  
country and the abandonment of the mines. Protection  
is also afforded by the influx of a white population, in-  
duced by the knowledge of the cropping out of the min-  
eral veins of Mexico at that point.

The great importance of the enterprise, and the mass  
of information essential to a proper understanding and  
appreciation of it, torbid the attempt to set it fully forth  
in a mere advertisement.

The lands are located on the line of the Southern Pa-  
cific Railroad, at the most favorable point for a seat of  
government for the proposed new Territory of Arizona,  
and of a branch railroad to the Gulf of Mexico. It is  
the design of the company soon to send a colony of the  
right sort of men, mechanics and farmers, who are  
stockholders, to develop and protect their vast inter-  
ests.

Having a land basis of probably equal value to the  
stock issued, the security ordinarily desired is thus  
afforded to the investment, independent of the immense  
annual revenue from the minerals.

The present issue of stock will be limited to 10,000  
shares of \$100 each, a large portion of which is already  
sold. The residue is now offered for sale to enable the  
company to complete its valuable purchases and develop  
its mines.

Parties desiring to become interested will be furnished  
with printed reports and information at the office of the  
Company. Their reports are derived from reliable and  
disinterested sources, and contain matter so astounding  
to the incredulous, that it would be impolitic to put  
them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O.



## Most Direct Route to the East. BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and  
Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH  
PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route. FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,  
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**RIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
1010 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK,  
Supt Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

1856.

## LITTLE MIAMI

AND COLUMBUS AND XENIA



EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

#### TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

#### FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

#### FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 3:45 P. M.

Freight—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan 2

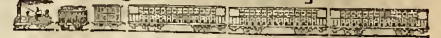
1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

Cincinnati, Hamilton & Dayton

[TRUNK LINE.]



RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:30, 4 and 6:30 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities.—Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M. INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M. MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburgh, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via Clyde, through to Cleveland at 9 P. M., making close connection with

### LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

### "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:30 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:30 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

#### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

#### RETURNING TRAINS

Leave Dayton at 5 and 8 A. M., and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 8:15 and 10:25 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU & INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Supt.

L. N. ANDREWS, Gen. Frtght Ag't.

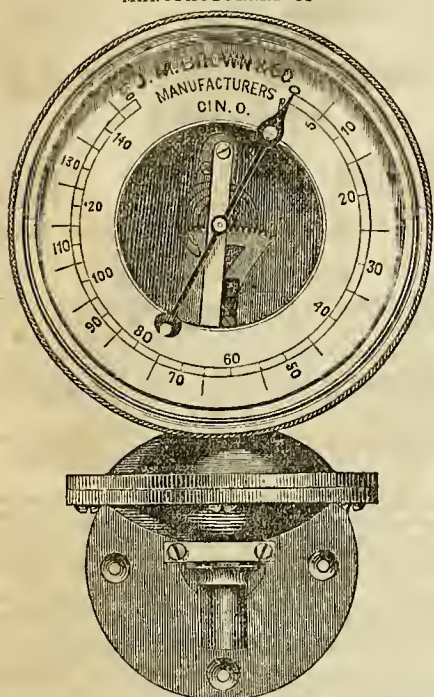
Indianapolis, Sept. 16, 1856.

[m29-1y.



## J. M. BROWN & CO.,

MANUFACTURERS OF



### IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front Street, Cincinnati, O.  
mar 26



### Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wreoches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
92 PLATT STREET, New York.

## RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping ports in England, or at ports of discharge in the United States. Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

## THE SCHENCK MACHINERY DEPOT

AND  
Leather Banding Manufactory,  
No. 163 GREENWICH STREET,  
NEW-YORK,

KEEPS constantly for sale, Tools suitable for Railroad Repair Shops, and having connection with some of the largest Establishments at the East, is prepared to furnish Tools of any description. Also the principal Manufacturer of the justly celebrated Woodworth's Patent Planing Machines in forty different varieties. Slide and Hand Lathes, Iron Planing Machines, Sash and Tenoning Machines, Mortising Machines, Upright Drills, Chucks, Steam Engines, and Boilers, Pumps of various kinds, &c., &c.

Oak-tanned Leather Belting,  
Patent Stretched, with the machinery, and cemented and copper riveted. Warranted superior to any made. Orders respectfully solicited.  
A. L. ACKERMAN, PROPRIETOR

Aug. 9 ly

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

## BUSH & LOBDELL

Wilmington - - - - - Delaware.

MANUFACTURERS OF  
CHILLED WHEELS

## AND TIRES, For R. R. Cars & Locomotive Engines,

ARE PREPARED TO  
Execute Promptly Orders to any Extent  
FOR THEIR  
CELEBRATED WHEELS,  
EITHER SINGLE OR DOUBLE PLATE,  
WITH OR WITHOUT AXLES.

WHEELS FITTED  
To Hammered or Rolled Axles,  
In the best manner, at the shortest notice, and on the  
Most Reasonable Terms.

ap 23

## W. G. HYNDMAN'S

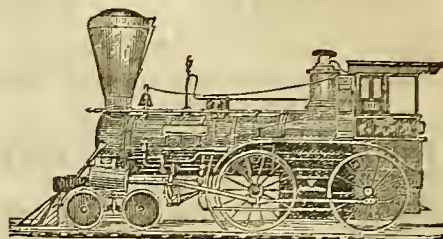


### Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for building of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap 23 41 East Second street, Cincinnati, O.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolsters for bridges cut with dispatch.  
ap 20 MOORE & RICHARDSON.

## Railroad Car Findings BRIDGES & BROTHER,

64 Courtlandt Street, New York.  
Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

LOCOMOTIVE ENGINE LANTERNS,  
From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.  
ENAMELLED HEAD LININGS  
Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trim-  
mings for windows and Seats. Varioish. Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.  
Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES.  
Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.  
ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
+ oc 6.

## GEO. D. WINCHELL & BRO., 172 Elm Street, bet. 4th and 5th, CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

## AND Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

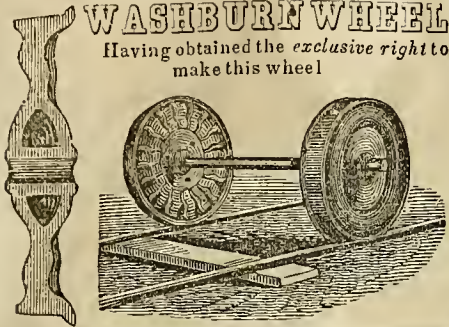
SILVER MEAL. (The highest prize) awarded to these pumps at the Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855.



**FULTON CAR WORKS,**

CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

**MUSKINGUM WORKS**  
ZANESVILLE, OHIO.**DOUGLASS, SMITH & CO.**

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight-wheeled Gravel Cars. We manufacture a superior

**CAR WHEEL,**

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

**WASHBURN WHEEL,**

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

**DAVENPORT, RUSSELL & CO.,**  
Railway Car Manufacturers,  
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridgen & Co., Fitchburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 16th\* **JOSEPH DAVENPORT.**

**S. C. THOMSON & CO**  
MANUFACTURERS OF

**PATENT PAD LOCKS,**  
For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2j NEWARK, N. J.

**GENERAL****RAILWAY SUPPLY AGENCY.****SNOOK & HILL'S PATENT****LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

**NEW YORK.****JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,****JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**ALBERT M. SMITH'S**  
**PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT**

For a Night and Day High or Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects

the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of **ALBERT M. SMITH, Patentee and Manufacturer,** dec 20-ly 13 North St. Paul st., Rochester, N. Y., or **TAULMAN & LOW, 157 Broadway, N. Y.**

**RAILROAD IRON.**

500 TONS best quality Welsh Rails, 56 lbs per lineal yard, now on the way from Great Britain; for sale by **VOSE, LIVINGSTON & CO.,** 9 South William street, N. Y. July 31

**THOMAS D. STETSON,**  
**Mechanical Engineer,**

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.  
Entrance 5 Tryon Row.  
Applications for Letters Patent. Careful written  
Opinions of Inventions. Important aid in bringing out  
Inventions. oc 29

**ALBERT M. LEA,**  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

**D. D. MILLER,**  
Manufacturer of  
LOCOMOTIVE, RAILROAD AND HAND  
LANTERNS,  
190 Water Street New York.

**RAILROAD MAP OF UNITED STATES**

NOW READY.  
A NEW RAILROAD MAP of the United States is now ready, and for sale, by **E. MENDENHALL,** 31, '56j 3 College Hall, Cincinnati O



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb5 tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.****JAMES HARRISON JR.'S**

**Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

dec11 Second avenue, corner of 22d street, N. Y.

**T. F. RANDOLPH & BRO.****Mathematical Instrument Makers,**

**N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.**

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

**RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened, the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY &amp; BROTHERS,

dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan8 ly 119 Walnut st., Odd Fellows' Building;

**The Great Arnold Secret Discovered at Last**

**BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**



edgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference in freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,**

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

**ARE** prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C.

aprl2

**Thorough Bred Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,****"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JULY 9, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " per month .....	3 00
" " six months .....	12 00
" " per annum .....	20 00
One column, single insertion .....	4 00
" " per month .....	10 00
" " six months .....	40 00
" " per annum .....	80 00
One page, single insertion .....	10 00
" " per month .....	25 00
" " six months .....	110 00
" " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors.

### CONTENTS.—NO. 20.

#### EDITORIAL.

Motive Powers.....	317
Competition.....	318
Railroads in Egypt.....	318
The Late Accident on the Marietta R. R.....	318
Brevities.....	318

#### RAILROADS.

Galena & Chicago Union R. R.....	319
Kenosha, Rockford & Rock Island R. R.....	320

#### MISCELLANEOUS.

The Main Line Injunction Case.....	320
Crossing of Railroad Tracks.....	323
Protection to the Overland Mail.....	325
The English Railway System—Its Cost and Profits.....	326
Terrible Accident in Switzerland.....	327

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	324
London Quotations.....	325
Monetary and Commercial.....	325
Sales at the New York Stock Board.....	325
Cincinnati Stock Sales.....	325

—TRANSIT R. R. MINNESOTA.—H. J. Hilbert of Winona is the Chief Engineer of this road. There are three surveying parties out on different routes.

—MINNESOTA & PACIFIC R. R.—The survey of this road has been commenced under the direction of Richard G. Turpin C. E. with a view to the location of the line from St. Paul to St. Anthony and to Stillwater. The following are the officers of the company: Edmund Rice President, R. R. Nelson Vice-President, James W. Taylor Secretary, J. M. Stone Treasurer, John B. Brisbin Attorney.

—MINERAL POINT R. R.—The Mineral Point *Tribune* of the 16th announces the completion of the railroad track, and the running of the cars to the depot in that city. Ground was broken for the road four years ago, and its progress has been impeded from time to time by various misfortunes—the Schuyler failure, we believe, being one of them.

—KENOSHA & ROCKFORD R. R.—The iron has been purchased for this road, and will be furnished as soon as the grading is sufficiently advanced.

### MOTIVE POWERS.

After the invention of steam power it was quite natural that ingenious and imaginative men should suppose that *power* as applied to the arts was not exhausted in steam; but that, as steam was such a prodigious advance on all similar applications of power, there might be others discovered and applied to machinery which would make other and more profitable advances. Accordingly (to say nothing of that perpetual humbug, *perpetual motion*;) we have had a series of inventors, each of whom was quite sure that he had discovered a new power which would astonish mankind, and give another wonderful impulse to the arts: Yet each of them has been much mistaken; not from any want of ingenuity; not from any want of positive success in the working of the power; but from a total misapprehension on two points: *First*, on the relative cost of powers; and *secondly*, from a proper estimate of what power consists in. When we take a fair view of *steam* in relation to these points, it seems quite impossible that *steam* should be supplanted by any other power which it is possible for nature to produce. The recent announcement of a *new* discovery in power affords us a text on which to consider the difficulties in the way of producing any element of power superior to steam. The Baltimore *Patriot*, with evident joy and surprise, announces that Professor SALOMON, after ten years effort and labor, has succeeded in completing his "Sulph. Oil Carbonic Acid Engine." The following is the account of the machine:

We called yesterday afternoon, much to our gratification, and saw the engine in full, successful operation, where it had been working without interruption several days, in Cypress alley, between Pratt and Lombard streets. The engine, being merely a model or experimental one, has, of course, some imperfections, and may be greatly improved, but it worked with remarkable precision and regularity. It is calculated for four-horse power, being a common rectilinear or reciprocating steam engine, differing in no material feature from those in general use. The patent novelty consists in the motive power and its application, which wholly supersedes steam. This motor is produced by a compound of desulphurated bisulphuret of carbon, coal tar, and volatile or fixed oil, which, under certain influences of heat, becomes powerfully expansive and thus gives momentum. Though only a four-horse engine, it was performing the estimated duty of ten horses, and has been so doing since put into operation, nearly a fortnight ago.

The fluid, or gas, constituting motive power, is used over and over again with scarcely any diminution or waste; being thrown, after performing its work, from the heater to the condenser, and from the condenser to the heater again, with thorough renovation. The heater, where the gas or fluid is introduced, is submerged in a cistern of heated oil, kept hot by a gentle fire. In this condition the gas expands, gaining its power, and, passing through pipes and valves, acts upon the piston, giving motion to the engine. The appliances are

simple, easy of comprehension, free from complication, and not subject to accident or disarrangement. Thus a steady, active force is at all times kept up.

The cost of this fluid is estimated at 10 cents per gallon, and it is demonstrated that eighteen gallons, by careful attention, will run an engine of the capacity here noticed, for one year. Its components are such as not to freeze, even at 90 degrees below zero. The amount of fuel is in a proportion of 15 pounds of coal to 100 pounds, compared with a steam engine of the same dimensions, while more than double the force can be brought into requisition. The engine which we saw in operation has a piston of 12 inches stroke, crank 6 inches. It was doing the service of ten-horse power, under break of a wheel 3 feet in diameter, 9 feet 11½ inches in circumference, pressed between two bars, one on each side, and a friction block on each bar 7½ inches in length and 2¼ inches in width, on an iron rim of 2½ inches under a weight of 112 pounds, making 80 revolutions per minute.

Now it is needless to say that carbonic acid gas cannot be made and heated, and raised to a *twenty-horse power*, at any such relative cost as that here stated. If carbonic acid gas is cheap, water is a great deal cheaper; and if coal is needed for one, it is needed also for the other. The error here is a very simple one. It consists in estimating the power and its application on a large scale, when *high expansion* is necessary, by the experiment on a small scale. Low expansions can be produced by any gas, but always at a cost greater than they are worth.

It is more than ten years since we saw Mr. Salomons experimenting on this very machine, and he had one in successful operation at Cincinnati; but *success*—that is, *going*—is no test of the value of a mechanical machine. It must have a vast, expansive, ultimate power to accomplish any great work, and that power must be furnished cheaply. There is nothing we know of, or that ever has been known, which will furnish the elements so well as steam. Let us notice some of the attempts in this way:

*First*, One of the great ideas of mechanical speculators was to set the world moving by *electro-magnetism*. It was very plausible. Twenty years since we saw a turning machine moved by electro-magnetism. Of course it was proved that electro-magnetism was a *motive power*. That was enough. About ten years ago Doctor somebody, in the Patent Office, made an electro-magnetic locomotive, and it actually went several miles on a railway, and was a *ten-horse power*. This seemed to be a complete triumph; but, from that day to this, *we never heard of another!* The fact is, that electro-magnetism is, of any high power, *very much more expensive than steam*. The result, of course, is a failure.

*Secondly*, We next have the *rarified air* of Capt. Ericsson. Of course *rarified air* is a *power*. The world knew that very well; but any high power of rarified air, capable of doing



great work, is *vastly more expensive than steam.*

We now come to the carbonic acid gas of Professor Salomons. Any gas is a power; but when we come to apply it practically to machinery, it is in no way comparable to steam. In the first place, none of these *gases* is so instantly and powerfully *expansive* as steam. They cannot do the work of steam; but, secondly, if it were possible to do the work, it is impossible to furnish any elements of power so cheap as *water and coal*. They are the simplest and cheapest of all the raw material of power.

The following table of comparative processes shows the utter fallacy of employing electro-magnetism, and will do just as well for carbonic acid gas:

"From a comparison which has been instituted as to the cost of different means of producing power, it appears that for every shilling expended there may be raised by—

Manual power.....	600,000 lbs. 1 ft. high in a day.
Horse ".....	3,600,000 lbs. " " "
Steam ".....	56,000,000 lbs. " " "
Electro-magnetism....	900,000 lbs. " " "

#### COMPETITION.

Competition in all business is a salutary condition; but there is such a thing as carrying even the best measures to an excess beyond even the rules of safe business. Such appears to us to be the present condition of the strife between the New York & Erie and the New York Central Railroads. They are two great lines of substantially equal length from Buffalo, the great eastern depot of the trade of the lakes, and New York, the metropolis of the seaboard. The Erie Railroad has perhaps a trifle of distance in its favor, while the low grades and straight line of the Central fully compensate for any apparent saving. The competition, then, so far as choice of routes is concerned, is very nearly equal; but there are other circumstances besides route and distance, that must enter largely into the consideration of advantage in competing lines; and not the least of these is the facility of doing business. Now the relative position of the two roads may be expressed as follows, in round numbers:

#### NEW YORK CENTRAL.

Stock.....	\$24,000,000
Funded Debt.....	12,000,000

#### NEW YORK AND ERIE.

Stock.....	\$12,000,000
Funded Debt.....	24,000,000

The above is given in round numbers, and, although not quite exact, gives with sufficient accuracy the relative positions of the two companies. From this it is evident that in the Central the stock is twice the amount of the funded debt, while in the Erie the funded debt is twice the amount of the stock. The Erie, therefore, has twice the burden of debt and interest to provide for, and its management is saddled with a load that is onerous to bear. So that while very large receipts are a mere matter of profit to the Central, they are a matter of vital importance to the Erie.

Hence the contest. The Central works for profit, the Erie for existence. But there are laws of business, even in competition, that cannot be violated without risk; and one of these laws is that all business must pay its own expenses. Now the last move in the game has been on the part of the Erie Road, to fix the fare from Buffalo to New York at five dollars, or about one cent per mile; while the actual cost of carrying the passenger, as per reports of the Railroad Commissioners, is about one and one-third cents per mile. It is, therefore, evident that this move is one which will not pay, and the sooner it is abandoned the less will be the loss to the road engaged in it.

It is to us a matter of very great question as to the right of railroad officials thus to sacrifice the interests of those they represent. In a matter of private business, if a merchant chooses to undersell a competitor at any cost, he has clearly a right to do so, provided he uses his own, and not his creditors' means in doing it; but, in a public corporation, it is very questionable whether the officers have the right to do a business on which they plainly lose money. The true course for the Erie Road to pursue is simply this: Do what business it can at remunerative rates, and do it in as economical a manner as possible. If a competing line possesses advantages which it cannot obtain, it must not attempt to compensate for these, and force a business which will entail a positive loss.

We speak thus plainly because we believe our position as railroad journalists warrants an expression of our opinion; and because we have seen the same course pursued before, but always with a loss to the party inaugurating it.

#### RAILROADS IN EGYPT.

A correspondent of the *New York Journal of Commerce* writing from Cairo, describes the railroads from Alexander to the Red Sea.

A peculiarity is seen in the construction of this road. I observed no sleepers except near the depot, instead of which, as the country could not furnish the timber, a hollow, iron apparatus is cast, much resembling the common culinary iron pot which is firmly fastened in the earth by sinking the open end, while the rails rest upon notches cast in the exterior of the other end. These, with small iron bars crossing the track, keep the rails fast. The railroad is 130 miles long, and is being extended to Suez, on the Red Sea, all of which distance is completed, except forty miles next to Suez, and will be opened the entire distance before the close of the year. The whole was built by an English company, and then sold to the Viceroy, who receives an income from it exceeding the most sanguine expectations of the projectors. The electric telegraph is already extended to Suez, from whence it is proposed to convey it to India.

Our southern roads, where timber is scarce and rots very rapidly may perhaps take a sug-

gestion from this contrivance adopted in Egypt. In countries not liable to severe frosts we should think the arrangement better and more permanent than the ordinary cross ties.

#### THE LATE ACCIDENT ON THE MARIETTA R. R.

On the morning of July 1, a serious accident occurred on the Marietta Railroad by the running of a passenger car off the track on the trestle-work near Vincent's Station. The trestle-work is there 53 feet high, and the passenger car which ran off the track fell this whole distance, striking the ground bottom upwards. Nearly every one in the car was injured, four persons killed outright and twenty wounded. A jury, summoned by the Coroner, after a patient investigation of the facts, have rendered the following verdict:

1. That the accident did not have its origin in any want of care and skill on the part of the conductor or engineer.
2. That the accident was caused by the failure of the forward truck of the passenger car to accommodate itself to the straight line, after being set to the curve, as it passed on the trestle.

A few days previous to this the steamer Montreal took fire in the St. Lawrence river, and resulted in the death of over 200 persons; and yet this tremendous accident, resulting in the loss of about fifty times as many persons as the accident on the railroad, has scarcely produced the excitement and alarm occasioned by the railroad accident.

What a testimony this single fact is to the safety of railroad traveling. It is true we hear of numberless accidents on the numerous railroads of our country; but the number of injured, compared to the number of travelers is very small.

But there is a moral for railroads connected with it that we should be recreant to our duty did we not insist on; and that is the importance of yet greater precautions in crossing bridges and trestles. Our companies must double the precautions they now take, and, heedless of the clamor of passengers at slow speed, prefer safety, in all cases, to any other consideration.

#### BREVITIES.

—CINCINNATI & CHICAGO R. R.—The opening of this road from Richmond to Logansport was celebrated by an excursion train which left this city on the morning of July 3, and appropriate public exercises at Logansport on July 4th. It was a very pleasant affair.

—MICHIGAN SOUTHERN & NORTHERN INDIANA R. R.—The Board of Directors of this road have appointed Charles Minot, the former Superintendent of the New York & Erie Railroad, Resident Manager, to be located at Chicago; J. M. Hopkins, the present Secretary of the company, Treasurer; and George H. Ford, Secretary.

—ILLINOIS RIVER R. R.—Work is to be commenced at once on this road between Chandlerville and Virginia.



—WESTERN WISCONSIN R. R.—The corporators of this road have organized by electing W. E. Parish, S. A. Clark, B. F. Fay, J. J. Chase and B. E. Hutchinson, of Crawford, and Nelson Dewey, J. Allen Barber, Daniel R. Bart, Simon E. Lewis, Albert W. Emery and Wm. P. Dewey, of Grant county, Directors.

This road extends from Dunleith to Prairie du Chien, a distance of about 50 miles, which, together with the line from Prairie du Chien to La Crosse, 55 miles, will place the people of La Crosse within 105 miles of Dunleith, and 280 miles of Chicago by the same route; and when the connection is completed between the Southern Wisconsin Road, 270 miles; or by Prairie du Chien, Madison and Janesville, to Chicago, 275 miles; or over the La Crosse & Milwaukee Road, by Portage City and Milwaukee, 285 miles. An immediate survey of the road is to be made.

—SANDUSKY, INDIANA & LOUISVILLE R. R.—A meeting of the stockholders of this road was held at Cambridge City on June 23. The following gentlemen were elected Officers: Lewis Maddox, Esq., President; Johane Amos, C. S. Donaldson, Jacob Mull and J. Shawhan, Rush county, Ind.; Hon. James Guthrie, of Louisville, Ky.; Sol. Meredith, of Richmond; Dafe Develen and Thos. Tyner Directors. The *Rushville Republican* says:

Stock solicitors have also been appointed, and the company is now fully organized.—They expect to go to work in earnest, and have the road completed at once. The work has assumed the name of the Sandusky, Indiana & Louisville R. R. It commences at Sandusky City, Ohio, and traverses about one hundred and ten miles of that State before it strikes the Indiana line. We believe the principal place on its route, after leaving Sandusky, is Union, where it will connect with several of the most important Western roads. It will take an air line course from the last named place to Louisville, Ky., passing through Winchester, in Randolph county, Cambridge, in Wayne county, Rushville, in Rush county, Shelbyville, in Shelby county, and Columbus, in Bartholomew county. The road will connect with the Bellefontaine Road at Winchester, with the Cincinnati & Chicago Road at Cambridge, with the Indianapolis & Cincinnati Road at Shelbyville, with the Madison & Indianapolis Road at Columbus, and with the Ohio & St. Louis Road at Jeffersonville, thus forming connections with all the principal routes in the State. About sixty miles of the road between Sandusky and Union is already graded and ready for placing the iron upon it. The President informs us that the iron has been procured for eighty miles of the road, and that it will be laid down immediately.

If the company succeed in negotiating for the Rushville & Shelbyville, and for the Shelbyville & Columbus Roads, and we have not the least doubt but they will, it will leave about one hundred miles of the road to be built. They expect to have the road completed and the cars running between here and Louisville this fall. We do not know the exact length of the road as contemplated, but it cannot fall far short of three hundred miles.

## Railroads.

### GALENA & CHICAGO UNION R. R.

We are in receipt of the Tenth Annual Report of this company, made to the stockholders June 3, 1857. The length of road operated by the company, as per report, is—

	Miles.
Main Line—From Chicago to Freeport.....	121
Elgin Branch—To connect with Fox River Valley Railroad.....	1½
Beloit Branch—From Belvidere to Beloit, connecting with the Beloit & Madison Railroad.....	21
Chicago, Fulton & Iowa Line—From its junction with the Main Line at Turner, thirty miles west of Chicago, to Fulton on the Mississippi River.....	105½
	249

Chicago, St. Charles & Mississippi Air Line—From the South Branch of the Chicago River, in Chicago, to Harlem Station, on the Main Line, (now controlled and operated by this company)..... 10½

Making the length of road operated..... 259½  
The cost of the 249 miles of road at the date of the last annual report was..... \$6,856,352 32  
During the last fiscal year there has been expended for construction as follows:

On Main Line.....	7,920 94
On Beloit Branch.....	847 61
On Chicago, Fulton & Iowa Line.....	67,555 34
On the Second Track.....	178,016 23
For Depot Grounds and Buildings.....	32,131 51
For Equipment.....	136,455 93
	\$7,279,259 88

The amount expended on account of the Chicago, St. Charles & Mississippi Air Line Railroad, at the date of the last report, was..... 566,883 54  
The amount which has been expended for this account during the last fiscal year is..... 61,233 07  
The amount expended on account of Interest, Exchange, Discount on Bonds and Incidentals, at the date of the last report, was..... 319,377 73  
The amount which has been expended for this account during the last fiscal year is..... 66,490 41

\$8,293,294 63  
The present amount of the funded debt of the company is as follows:

First Mortgage Bonds, payable in 1862 and 1863; interest 7 per cent. per annum, payable semi-annually.....	\$3,000,000 00
Second Mortgage Bonds, payable in 1875; interest 7 per cent. per annum, payable semi-annually.....	906,000 00
Litchfield Bonds (Chicago, St. Charles & Mississippi Air Line), payable in 1859; interest 7 per cent. per annum, payable semi-annually.....	52,015 28
	\$3,958,015 28

"The second mortgage provided for the issue of two millions of dollars of bonds. Up to the first of May last, there had been \$98,000 of these bonds purchased, cancelled and surrendered to the Trustee on account of the payment of installments due to the sinking fund; and there had been sold in the market, up to the same date, \$906,000, making, together, an issue of \$1,004,000.

"On the 24th of March the Board of Directors passed a resolution offering to the stockholders the remainder of these bonds (\$996,000) at seventy-five per cent.; and, on the first of May last, this amount was apportioned among the subscribing stockholders, and when fully paid for, will yield the company \$747,000.

"The floating debt, on the 1st of May last, was \$611,567 40. The greater portion of this amount falls due within four months, and will be paid from the avails of the second mortgage bonds, which are now being rapidly taken and paid for by the subscribers thereto.

"A track has been laid down at the joint

expense of this company and that of the Illinois Central, the Michigan Central and the Chicago, Burlington & Quincy Railroad Companies, from the Depot on the South Branch of the Chicago River, to connect with the tracks and depot of those companies. The proportion of the expenses which this company has paid for the right of way for this track, laying it down, etc., is \$20,000.

"Another track has been laid by this company which connects the South Branch depot with the tracks of the Michigan Southern and Northern Indiana Railroad Companies.

"By means of these tracks your road has now direct and convenient connections and access to all of the roads leading out of Chicago eastwardly and southwardly, viz: to the Illinois Central, the Michigan Central, the Chicago, Burlington & Quincy, the Michigan Southern & Northern Indiana, the Chicago, Alton & St. Louis, the Pittsburg, Fort Wayne & Chicago, and the Chicago & Rock Island Railroads.

"The gross earnings of the road for the last fiscal year have exceeded those of the preceding year by the sum of \$100,556 89.

The gross earnings have been.....	\$2,416,343 85
There was received for interest.....	3,080 00
The surplus on the 1st of May, 1856, was....	380,828 45
	\$2,800,052 30

The expenses for the fiscal year have been as follows:

For operating expenses.....	\$1,295,493 69
For interest paid on bonds....	209,148 32
For the dividends paid to the stockholders in February and August (20 per cent.).....	1,095,590 00
For the amount paid for installments to November, 1856, and May, 1857, in the Sinking Fund.....	46,100 00
	2,646,332 01

Net surplus..... \$153,720 29

"Since the 1st of May, 1856, all the interest which has accrued on the funded debt has been paid out of the income. The amount which has been expended for operating the road embraces a large sum paid for re-rolling iron rails; for the purchase of new rails, ties, chairs and spikes; for the renewal and repairs of the track; for the cost of permanent stone culverts substituted for the timber culverts originally constructed; and for the permanent and temporary bridges and culverts which have been built to replace those which were injured or destroyed by the freshets of the last winter and spring; and also restoring the road bed, which was injured from the same cause."

### SIDE TRACKS, STRUCTURES, ETC.

The total length of road operated is as follows:

	Miles.
Main Line, from Chicago to Freeport.....	121
Beloit Branch, from Belvidere to Beloit.....	21
East Elgin Branch.....	1.50
C. F. & I. Line, from Junction to Fulton.....	105.50
St. C. A. L. Branch, from Chicago to Harlem.....	10.50
	259.50

The length of side track is as follows:

Chicago.....	8.70
Main Line and Beloit Branch.....	15.80
C. F. & I. Line.....	14.30
St. C. A. L. Branch.....	2.20
The total length of second track laid.....	22.50
	322.10

Making about one mile of side track (reckoning the second track as such) to every four miles of main track.



## EQUIPMENT.

The present equipment of rolling stock is as follows:

56 Locomotives,
30 First Class Passenger Cars,
4 Second Class Passenger Cars,
6 Emigrant Cars,
10 Baggage, Mail and Express Cars,
709 Covered Freight Cars,
146 Platform Freight Cars,
60 Burthen Freight Cars,
110 Hand Repairing Cars,
125 Small Gravel Cars.

The report proceeds to give the fiscal statement of the company as follows:

"The total number of passengers that have traveled over the road has been—

GOING EAST.	
Way Passengers, 1st class.....	234,817½
" " 2d ".....	5,422
Through Passengers, 1st class.....	44,443½
" " 2d ".....	5,260½
Total going East.....	279,948½
GOING WEST.	
Way Passengers, 1st class.....	247,650
" " 2d ".....	6,916
Through Passengers, 1st class.....	61,590
" " 2d ".....	16,649
Total going West.....	332,805

The general summary of the mileage of the road is as follows:

No. of miles run by freight and passenger trains.....	995,637
No. of miles run by switching engines, wood and gravel trains.....	95,557
No. of miles run by C., B. & Q. freight and passenger trains on Galena & Chicago Union track.....	135,450
Total miles run by all trains.....	1,226,644
No. of tons of freight carried one mile.....	42,794,965
No. of passengers carried one mile.....	31,420,941
Aggregate mileage of freight and passengers.....	74,215,939
Earnings per mile run (1,153,894 miles).....	\$2 09.4
Expenses per mile run (1,153,894 miles).....	1 12.3
Net earnings per mile run.....	97.1
Per centage of expenses to earnings.....	53.614
Cost per ton per mile, assuming one passenger equal to one ton.....	c. 1.74
Cost of maintenance of way per mile run (1,226,644 miles).....	c. 17.49
Cost of repairs of engines and cars per mile run (1,091,194 miles).....	c. 20.03
Cost of fuel per mile run (1,226,644 miles).....	c. 21.09
Number of passengers or tons carried per mile run (1,153,894 miles).....	64.31
Average length of track in operation during the year.....	249
Gross earnings per mile of track in operation.....	\$9,704 15
Net earnings per mile of track in operation.....	5,202 78

## KENOSHA, ROCKFORD &amp; ROCK ISLAND R. R.

The Kenosha, Rockford & Rock Island Railroad Company is formed by the consolidation of the Kenosha & Rockford and Rockford & Mississippi Railroad Companies, under their respective charters, in accordance with the unanimous vote of the Directors of the latter company, and since unanimously ratified by the stockholders at a meeting called for that purpose. This railroad commences at Kenosha, Wisconsin, 53 miles north of Chicago and 34 miles south of Milwaukee, and runs in a southwesterly direction 70 miles to Rockford, Illinois; thence it will be continued down the valley of Rock River to the city of Rock Island, 105 miles from Rockford, a total of 175 from Kenosha. The Directors of these two companies have issued an exhibit of their prospects and purposes, of which we give an abstract.

Kenosha is the second commercial city in the State, with a harbor of great excellence, capable, with proper improvements, of accommodating shipping to any amount, and accessible in all weathers. The company own extensive wharf accommodation and real estate in the city near the crossing of the Chicago & Milwaukee Railroad, valued at \$90,000.

Rockford, the present westerly terminus of the line, is the largest manufacturing city in Illinois, except Chicago, and has vast water power. The value of its manufactures fur

1856 was \$1,225,000, and the last annual report of the Galena & Chicago Union Railroad shows the amount of receipts at this point at \$206,230, or nearly one-tenth of the receipts of the whole line. This city is making rapid progress, and has now a population of about 8,000.

The road has the following connections: At Genoa with the Wisconsin Central, 28 miles from Kenosha and 75 miles from Chicago.

At Harvard with the Chicago, St. Paul & Fond du Lac, 43 miles from Kenosha, 62 miles from Chicago and 28 miles from Janesville.

At Caledonia with Beloit Branch of Chicago & Galena, 57 miles from Kenosha, 75 from Chicago, and 11 from Beloit.

At Rockford with the Chicago & Galena, 70 miles from Kenosha, 92 from Chicago, and 28 from Freeport.

It will be seen that all these roads cross the Kenosha & Rockford in the direction of Chicago; yet from every point of intersection Kenosha is the nearest lake port. This fact will tend to attract heavy freights to this route, as the cheapest mode of reaching the point of shipment.

Among other considerations, the fact that storing and other fees are cheaper at Kenosha than at Chicago, that it is fifty miles nearer Buffalo by water, that wheat brings a higher price, and lumber is furnished cheaper there, would seem to warrant the conclusion that the Kenosha & Rockford Railroad will share the trade of towns as near to that city as to Chicago.

It is intended to complete the road from Kenosha to Rockford, 70 miles, the present season. On the first 20 miles, the heaviest portion, over \$350,000 have already expended, and the track is expected to be laid across Fox River by the 1st of June. Three locomotives, and cars sufficient for use until the completion of the road, are on hand. The right of way through the city and county of Kenosha has been procured at a sum not exceeding \$30,000, and favorable running connections are established with the Lake Shore Road, with a passenger depot common to both. The balance of the road, from Fox River to Rockford, is under contract for completion October 1st, 1857, at \$6,000 per mile, rails, depots and equipment excepted, payable in farm mortgages and stock at par. The right of way will not exceed \$200 per mile.

Of the amount expended, \$50,000 is company's bonds, ditto Kenosha city bonds; the balance of \$350,000 is stock subscription.

Of the remaining portion of the road to the Mississippi river, the survey from Rockford to Dixon is not yet completed, but the company are satisfied that, except the bridge over Rock river, the work will be but little heavier than from Rockford east, while below Dixon it will be lighter, the grade not exceeding 20 feet to the mile, and the grading and bridging can be executed at a cost of \$3,000 per mile. The rapids on Rock river give an extensive and valuable water power, which is improved by flourishing villages along its banks. This road crosses the river twice in 105 miles, at Dixon and Sterling; and all the towns on the route are without railroad facilities. The effort to procure subscriptions in these towns has met with ample success.

The business prospects of the road may be judged of by reference to its geographical position and the statistics of wealth, produce and population. The following facts are also stated in this connection:

1. There is no competition with water transportation.

2. The road costs much less than the average of Eastern roads.

3. The charges are higher.

4. Nowhere, in Eastern or Middle States, is so large an extent of country dependent on railroads for the transportation of produce.

5. Lumber for towns and villages must be transported by railroad.

6. All the roads running westerly from Lake Michigan are dividend paying roads.— Besides these facts, the commercial facilities between the lake ports are every year increasing, and, as the cost of railroad transportation induces dealers to seek the nearest point of shipment, this line affords the required route. It is also a cheap and advantageous route of travel.

It is anticipated that the lumber business will furnish one of the most prominent articles of freight. The demand in the region south and southwest of Lake Michigan is immense, and all the western roads find it one of their chief items. This is now carried from Chicago to Rock Island, 182 miles; but on the completion of the Kenosha Road, the distance will be reduced to 175 miles, enabling it to be carried at a cheaper rate—*Gazette, Chicago.*

## THE MAIN LINE INJUNCTION CASE.

OPINION OF THE COURT.

*The Injunction against the Sale Refused—The Report of the Taxes declared Invalid.*

SUPREME COURT.—Chief Justice Lewis, and Justices Lowrie, Woodward, Knox, and Armstrong. Yesterday the following opinion was delivered by Chief Justice Lewis:

HENRY S. MOTT, et al., CANAL COMMISSIONERS VS. THE PENNSYLVANIA RAILROAD CO., et al., LEWIS, CH. J.

Three bills in equity have been filed, in each of which a motion is made for an injunction to prevent the sale of the Main Line of the Public Improvements of the State, under the act of Assembly of the 16th May, 1857. These motions draw into question the rights of the Canal Commissioners, of the State creditors, of the tax-payers of the Commonwealth, and of the stockholders of the Pennsylvania Railroad Company, to interfere in the great question involved. On all the questions about to be decided, I proceed to deliver the unanimous opinion of the whole Court.

Although there is some difference in our reasons for denying to a dissenting stockholder, who is offered compensation for his stock by the terms of the Act, the preliminary injunction asked, we all agree in refusing his motion. His rights are to be determined on the final hearing.

We do not consider it necessary to express any opinion on the question whether the holder of a certificate of State loan has such a pledge of the tolls on the State canals and railroads as could be enforced in a Court of Justice. Conceding for the purposes of the present motion, that he has such a pledge, we are, nevertheless of opinion that the right of a pledge extends no further than to require a sale of the thing pledged, and an application of the proceeds to the payment of his claim. This is what the Act of Assembly proposes to accomplish. It is what a Court of Equity would do, under the circumstances disclosed, if the controversy were between private individuals. But the Legislature has the right to prescribe remedies and change them at pleasure, so that the rights of the parties are not materially impaired.

We are perfectly satisfied that the rights of the State creditors will not be impaired by a fair public sale of the Main Line to the highest and best bidder, and the application of the pro-



ceeds to the payment of the State debt. On the contrary, we are bound to presume, from the evidence before us, that such a proceeding will be highly beneficial to the creditors of the State. It will reduce the amount of the public debt, and render the residue more secure. We have no right to presume that the Works will be sold for less than their full value. The creditor has therefore no case for relief on the footing of the pledge of the tolls on the Public Works.

But the Canal Commissioners, the tax-payers and the creditor, object to a contract of sale under which the right to punish the purchasing corporation for misuse or abuse, and the right to tax the Pennsylvania Railroad Company for State purposes, and another Company for tonnage, is for ever extinguished. It is alleged that the Legislature have no constitutional authority to bind succeeding Legislatures, in these particulars. If such a contract be unconstitutional and void, the Canal Commissioners are in the line of their duty in suggesting this objection to the Court, and if the Court could hold the Act of Assembly void, it would be the duty of the Commissioners, as faithful agents of the State, entrusted with the custody and management of the Works, to retain possession of them for the use of the Commonwealth, regardless of the unauthorized attempt to deprive the public of their rights. If the Legislature have no right to release the means on which the State and her creditors must rely for the payment of her public debt, any creditor whose security is about to be thus impaired, has a right to be heard in opposition to the measure proposed. The tax-payers, whose burthens will be necessarily increased by releasing from taxation any portion of property liable to contribute to the payment of the public debt and the expenses of government, have also an interest in the question, and, of course, have a right to be heard.

A judgment of ouster against a corporation, duly put into execution, works its dissolution. According to the ancient common law, where there is no statute provision to the contrary, upon the civil death of a corporation all its real estate remaining unsold reverts back to the original grantors and their heirs. The debts due to and from the corporation are all extinguished. Neither stockholders nor the directors nor trustees can recover debts or be charged with them in their natural capacity. All the personal estate vests in the Commonwealth. 2 Kent's Com. 307; 1 Black's Com. 484. But under the modern rule of equity jurisprudence, the severity of the common law in this respect is greatly mitigated, and it is held that it is the franchise, and not the property of the corporation, that is forfeited by a judgment of ouster, and that the property of the corporation is a trust fund for the payment of debts and distribution among stockholders. Wood v. Summer, 3 Mason's R. 309; Adair v. Shaw, 1 Sch. and Lefr. 261; Mumma v. The Potomac Company, 4 Peters, 281. The Canon Company 23, L. & E. 315; Travis vs. Milne, 9 Harc. 141; Baron et. al. vs. Robertson et. al., 18 Howe U. S. Rep., 480. The 15th section of the act of 16th May, 1857, enables the Legislature, at their election, after judgment of ouster, to revoke the privileges of the corporation, and to take the roads and canal for public use, giving full compensation to the stockholders. This provision does not vary very materially from the rule which equity would adopt, independent of the act of Assembly. It is no release of the punishment for misuse or abuse. Nor is it a release of the eminent domain under which the corporation may be repealed without either abuse or misuse whenever the public interest requires it, on giving just compensation to the stockholders. The word "may," as applied to the action of the Legislature in this respect, is not to be construed as "shall" or "must."

If the construction were doubtful, the doubt must be resolved in favor of the State. A corporation can never claim a privilege against the State without showing that it is clearly entitled to it by the terms of the charter. There is nothing in this section which binds the Legislature to make "full compensation to the stockholders." This is only to be done if the Legislature should, by a legislative act, revoke the privileges granted; but there is no obligation, on their part, to pass any act of revocation. If this should not be done, the judgment of ouster with all its legal and equitable incidents, would remain in full force. There is, therefore, no release of the right to punish for misuse or abuse, nor any release of the eminent domain in the provisions contained in the 15th section of the act of Assembly.

We now come to the vital question involved in those applications. The act of Assembly of 16th May, 1857, makes provision for a public sale, and, for the purpose of inviting competition, directs that public notice of the time and place be given in one or more newspapers of extended circulation, published in the cities of Philadelphia, Pittsburgh, Washington, Boston, New York, and in the borough of Harrisburg. It authorizes "any person or persons, or railroad or canal company now incorporated, or which may hereafter be incorporated under the laws of this Commonwealth, to become the purchasers for any sum not less than 7,500,000 dollars." But there is a proviso in the 3d section, which declares that "if the Pennsylvania Railroad Company shall become the purchasers, at the said public sale, or by assignment, they shall pay, in addition to the purchase money at which it may be struck down, the sum of 1,500,000 dollars, and in consideration thereof, the said railroad company, and the Harrisburg, Mount Joy and Lancaster Railroad Company, shall be discharged by the Commonwealth forever, from the payment of all taxes upon tonnage or freight carried over said railroads, and the said Pennsylvania Railroad Company shall also be released from the payment of all other taxes or duties on its capital stock, bonds, dividends, or property, except for school, city, county, borough or township purposes. The amount of taxes proposed to be released is beyond calculation. It can only be conjectured. It would be greatly increased by the tax which would of course be levied on the property about to be sold to the Company. Judging from the increase during the last five years, and the constant augmentation of commerce and travel along the route, it would seem reasonable to believe that in five years from the time it would be double its present amount.

But conceding that the tax to be released will hereafter amount to no more per annum than the sum paid in 1856, the amount awarding to the admissions of the Railroad itself, would be \$280,739 21 per annum forever. This sum is more than equal to the interest on \$5,600,000 at 5 per cent., the rate to be charged to the purchasers. In other words, the Act of Assembly proposes to give to the Railroad Company a consideration equal to \$5,600,000 for \$1,500,000, and thus to give that company an advantage equal to \$4,100,000 over every other bidder at the sale. By means of this privilege, the Pennsylvania Railroad Company may drive from the field of competition all other bidders. It is essential to every fair public auction that all the bidders shall stand upon an equal footing.

If the object had been to make a fair sale of this portion of the State revenue, it might have been evinced by a provision for the transfer of it to the highest bidder, without any distinction in favor of any one. But this was not done. The extraordinary proviso, in favor of the Pennsylvania Railroad Company, is partial and entirely repugnant to the general intent of the act; and if allowed to stand, the sale under it

will furnish one of the most magnificent exhibitions of a "mock auction" that the world has ever witnessed! We rejoice to say that the highly respectable and upright officers of the corporation, disclaim in the most solemn manner, under oath, all agency in procuring the enactment in question.

But has the Constitution conferred upon the Legislature the authority to extinguish, forever, by bargain and sale, the power to raise the revenue for the support of government? All free governments are established by the people for their benefit, and the powers delegated are to be exercised for their common good, and not, under any circumstances, to be sold or destroyed, so long as the nations establishing them have the physical power to maintain their independence. Individuals cannot subsist without food. Deprive them of "the means whereby" they live, and you destroy them as certainly as if you did it by shedding their blood.—The necessities of governments are as great as those of individuals. No government can exist without revenues to defray its expenses and support its officers and agents. The revenue is the food indispensable to its existence. Deprive it of this and you stop it of all power to perform its duties, bring it into contempt by its uselessness and helplessness, and ultimately destroy it as effectually as if it were overturned by domestic violence or subjugated by the conquest of a foreign foe. Government is but an aggregation of individual rights and powers. It has no more right to commit political suicide than an individual has to destroy the life given by his Creator. Contracting away the taxing power in perpetuity tends, as we have seen, inevitably to the destruction of the government. If twelve or twenty millions of taxable property may be released to-day, one hundred millions may be released to-morrow, and, the principle being established, the process might go on until all power to raise revenue was gone. If this did not destroy the government, it would result in something infinitely more dangerous to the liberties of the people. It would make it the servile dependant of the the wealthy corporations or individuals to whom it contracted away its means of support. Although the taxing power is but an incidental one, to be exercised only as a necessary means of performing governmental duties, it is nevertheless a branch of the Legislative power, which always in its nature implies not only the power of making laws, but of altering and repealing them as the exigencies of the State and circumstances of the times may require. Rutherford's Institutes of National Law, b. 3, ch. 3, s. 3. If one portion of the legislative power may be sold, another may be disposed of in the same way. If the power to raise revenue may be sold to-day, the power to punish for crimes may be sold to-morrow, and the power to pass laws for the redress of civil rights may be sold the next day. If the Legislative power may be sold, the Executive and Judicial power may be put into the market with equal propriety. The result to which the principle must inevitably lead, proves that the sale of any portion of governmental power is utterly inconsistent with the nature of our free institutions, and totally at variance with the object and general provisions of the Constitution of the State. It may be urged that we must confide in the fidelity of the Legislature, and that there is every ground for hope that they would not carry such measures to an unreasonable length. This is no answer to the argument. It is a question of Constitutional authority, and not a case of confidence at all. Limitations of power established by written Constitutions have their origin, in a distrust of the infirmity of man. That distrust is fully justified by the history of the rise and fall of nations.

But conceding that this practice will not be



carried so far as to destroy the government, is there any warrant for it to the extent to which the Act of Assembly proposes to go in the present case? It was held by this Court in Wood's Estate, 9 Harris, 114, that "the duties of sovereign and subject are reciprocal, and any person who is protected by a government in his person or property, may be compelled to pay for that protection. As taxes are to be assessed for the sole purpose of supporting the government, the propriety of exacting them, the persons and property to be made liable, and the rules for their assessment and collection are to be determined by its authority. It is, however, a rule of the public law, founded on a principle of justice which no government can disregard without violating the rights of its citizens, that taxes shall be assessed in such manner that all the citizens may pay their quota, in proportion to their abilities and the advantages they derive from the society."—9 Harris, 114; 10 Harris, 497. This principle is sanctioned by writers of the highest authority—Vattel, b. 1, ch. 20, s. 240; Rutherford, Inst. of Nat. Law, b. 2, ch. 3, s. 5; Puffendorf's Law of Nations, b. 7, ch. 9, s. 10. It is expressly declared by Baron Puffendorf, that "no immunities or exemptions" (from taxation) ought to be "granted to certain persons to the defrauding or oppressing of the rest." It is upon this principle that, when the private property of the citizen is taken for public use, just compensation is to be made to him out of the common fund, in order that the contribution to the public interest may fall in a just proportion upon each citizen—Rutherford, b. 2, ch. 3, s. 5. As the Legislature are necessarily the judges of the method of assessing taxes, it is to be presumed that they have regarded the rule of contribution sanctioned by justice and the equal rights of the citizens; and their enactments are not always subject to judicial review. Where they make appropriations to institutions of learning, or charity, or grant lands or pensions to persons who have served in the defence of the nation, it is presumed to be a compensation for the good that has been done or is to be done to the community.—Where they grant to the same institutions or individuals an exemption from taxation, such grants, for the same reason, are not regarded as a violation of the rules of justice and equality. So long as there is no contract which may tie the hands of succeeding legislatures against repealing such exemptions—and so long as they are not repealed, they seem to have been enforced as a legitimate exercise of legislative power—1 S. & R. 62; 6 Watts, 435.

But where there is no pretense of an intention to equalize the taxation among the people, but an avowed purpose to sell to one class of citizens an exemption from all taxes forever, and thus to throw all the public burdens upon the other, for all time to come, it is, to all intents and purposes, imposing a tax upon them without the consent of their representatives, and is such a plain, palpable and open violation of the rights and liberties of the people—such a clear case of transcending the just limits of legislative power, that the judiciary is bound to pronounce such an act null and void.

No class of corporations stand more in need of the protection of the government, or occupy more of the time of the Legislature and the courts of justice, or occasion more expense to the government than railroad corporations. From the expensive nature of their operations, the power to take private property for the construction of their works and their continual collision with each other's interests, and with the interests of individuals and municipal communities, they require the constant and energetic protection of the strong arms of the government. Withdraw that protection and they would be left to the mercy of popular outbreaks, manifesting themselves by opposition to their progress and the destruction of their works

whenever the location of their roads or their depots or any of their numerous and necessary operations come in conflict with the interests of particular localities. These corporations should be the last to consent that the government should be enfeebled by the diminution of its revenues, or to ask that it should be bound to exert all its energies, and incur large and constant expenditures for their protection while they are exempt from contributing their share.

These principles are not so infirm as to stand in need of the staff of authority for support. They are the result of that liberty and equality which was established by the revolutionary struggle of our ancestors. They are perfectly understood by every one who has capacity to comprehend the nature of our free institutions. They are deeply impressed on the hearts of the people, and they are fully recognized by the history, the objects and the language of our State Constitution.

The case of New Jersey vs. Wilson, 7 Cranch, 164, is cited in opposition to this doctrine. It was decided without argument on the part of the State. It has relation altogether to the power of the Colonial Government by treaty with the remnant of a tribe of Indians, who released lands claimed by them in consideration of the grant of other lands free from taxation. The Indians occupied in some respects the condition of a separate nation. Nations are frequently obliged, for the sake of the public peace, to make concessions to each other, which could not be justified if the transaction were between a State and individuals, and if the rules which govern in the construction of the treaty making power do not apply to ordinary contracts. But it is a sufficient answer to this case to say that the power of the Colonial Government of New Jersey, before our free governments were established by the revolution of 1776, furnish no rule whatever for ascertaining the powers of the legislature of Pennsylvania under our present Constitution.

In the case of Gordon vs. the Appeal Tax Court, 3 Howe, 142, it was "admitted by the Attorney General of the State of Maryland that there was a contract between that State and the Banks, and that it was protected by the Supreme Court of the United States." The question of the Constitutional power of the Legislature to contract away the taxing power was therefore neither raised nor decided. If it had been, the question would have had relation to the powers conferred by the Constitution of Maryland, and not to those by that of Pennsylvania.

The case of Hardy vs. Watham, 7 Pick, 110, was that of an exemption granted by the old Colonial Ordinance of Massachusetts of 1650, and subsequently confirmed by the people in their State Constitution. A decision affirming the power of the people, when establishing their Constitution, to confirm an exemption from taxation granted to a college by an ancient Colonial law, has nothing whatever to do with the question involved in this case. That the people themselves possess this power has never been doubted. All power emanates from them. But it is denied that they have in this State granted any such power to the Legislature.

In Atwater vs. Woodbridge, 6 Com. Rep. 223, and in Seymour vs. Hartford, 21 Com. Rep. 481, the question of the right of the Legislature to contract away the taxing power, so as to bind future Legislatures, did not arise, because the subsequent enactments were non-constructed or understood as a repeal of the exemptions previously granted. The intimations of the Judge in delivering the opinion in the last mentioned case, that such a power had been judicially sanctioned, go for little, particularly when we see that he deprecates the exercises of such "a high act of legislative power," and declares the intention of the Court "not further to extend this exemption from taxation." The progress

of the age and the experience of government enables it to see and correct the errors committed during its youth and inexperience.

In Brewster vs. Hough, 10 New Hampshire Rep. 138, it was held that "the power of taxation is essentially a power of sovereignty or eminent domain," and Chief Justice Parker, in delivering the opinion of the Court, questions the power of the Legislature to make a contract by which it shall be surrendered, without express authority for that purpose in the Constitution. He held that there is a material difference between the right of a Legislature to grant lands, or corporate powers, or money, and a right to grant away the essential attributes of sovereignty. These, he adds, do not seem to furnish the subject matter of a contract. In these views we fully concur. The attribution of power by the State to the Union is not in conflict with this principle, for the act of Union is but an enlargement of the political society for certain described purposes, and the power of taxation that passed to the Federal Government was but a natural and necessary sequence of it. It was not extinguished by contract but merely transferred to another portion of the government, to be exercised for the general welfare under the limitations prescribed.

In general the State Courts have avoided expressing an opinion on this momentous question, where the necessities of the case did not require it. The cases which have arisen, have generally been disposed of by holding that "exemptions are binding until repealed by subsequent Legislation"—that "no charter or grant carries with it such exemption unless clearly expressed"—that "the taxing power is of vital importance and is essential to the existence of government"—that it is "a part of the power of legislation"—that "it resides in a government as part of itself" and that "the release of it is never to be assumed." Most of these principles are announced by Chief Justice Marshall in the Providence Bank vs. Billings, 4 Pet., 561, 562, 563, and recognized by many decisions in this and other States. 10 Barr, 442; 12 Harris, 232; 10 Harris, 496. But the question has been distinctly decided against the existence of any such power five different times by the unanimous judgment of all the Judges of the Supreme Court of Ohio. Debolt vs. The Ohio Life Ins. and Trust Co.; 1 Ohio State Reports, 563; The Toledo Bank vs. The City of Toledo; *Ibid*, 623; Mechanics' and Trader's Branch Bank vs. Debolt, *Ibid*, 591; The Miland and Ruhland Plank Road Company vs. Husted, 3 Ohio Rule Reports 578; The Norwalk Plank Road Company vs. Husted, 3 Ohio State Reports, 586. In one of these cases it was declared that the Legislature had not the constitutional authority to abridge or in any manner whatever surrender any portion of the right of taxation, and that this question had been settled by solemn adjudication, and is not now an open question in that State. 3 Ohio State Report, 581. It is true that the Supreme Court of the United States has taken a different view of the question, and has, in several cases, reversed the decisions of the Supreme Court of Ohio. Piqua Bank vs. Knoop, 16 Howe, 369; Mechanics' and Traders' Bank vs. Debolt, 18 Howe, 380; same vs. Thomas, *Ibid*, 304; Dodge vs. Woolsey, *Ibid* 331.

The decisions of the Supreme Court of the United States, on the construction of the Constitution or laws of the United States, are binding on the State courts. The decisions of the Supreme Courts of the several States, on the construction of the Constitution and laws of their respective States, are, in like manner, binding on the Supreme Court of the United States. That Court has no more right to overrule a judgment of a State Court, on a question of State law, than the State Court has to overrule the United States Court on a question of United States law. All contracts are to be construed and understood according to the law of



the place where they are made and to be performed. The laws and constitution of a State are to be construed and understood everywhere according to the judicial construction which they receive in the State where they are made and are to operate. This is the rule of jurisprudence which prevails universally throughout the civilized world. It is the rule which always ought to govern, and which generally does govern the Supreme Court of the United States. Whenever there is a departure from it the necessary result is to impair public confidence in that exalted tribunal and to introduce disastrous confusion into the administration of the law. It cannot be expected that the judges of the Federal Court should be as familiar with the constitution, laws and usage of Ohio, as the Supreme Judges of that State, who reside within her limits—who have been chosen on account of their acquaintance with her laws and whose especial business it is to expound them. The decision of the highest judicial tribunal in a State, or the construction of the State Constitution, or a State law, is authoritative everywhere when the same question arises, because it is pronounced by the only tribunal having direct and immediate jurisdiction over the question. The decision of the United States Court on the same point, where it incidentally arises, is not authority elsewhere, because it has no direct and immediate jurisdiction over the question. Its duty is to receive the State law as it is expounded in the tribunal of the last resort in the State. These views furnish a plain rule for estimating the value of the conflicting decisions which have been cited. We have no hesitation in adopting the decisions of the State Courts, on all questions respecting the meaning of their own State Constitutions, and the extent of the powers which the people of the States have therein granted to the different departments of their own State governments. It may be added that the United States Court was divided in opinion on this question. The eminent Judges of that Court dissenting, while the State was unanimous. And it is but just to say that the opinions of the State Court are sustained by a course of argument which has never been satisfactorily answered in the United States Courts or elsewhere.

Chief Justice Taney, in maintaining the opinion of the United States Court, admits that that Court "always follows the decisions of the State Courts in the construction of their own constitution and laws;" but he adds that "where these decisions are in conflict the United States Court must decide between them," and he then put the decision on the ground that the alleged contract was made "under a construction in favor of its validity, which had been undisputed for nearly fifty years by every department of the Government, and supported by judicial construction." 16 Howe, 431. If these were the facts of the case we find no fault with the decision, except that the State Court, and not the Federal Court was the proper tribunal to pronounce it.

We have no sympathies with States or individuals who desire to break engagements entered into with their agents, on the ground that the latter have transcended their authority, after the principles, by acquiescence and encouragement, have induced unsuspecting parties to enter into such engagements, and invest their money on the faith of them. Common justice requires every principal to disavow the act of an agent who exceeds his authority the moment it is known. But, in the case now before us, there has been neither encouragement nor acquiescence. The unauthorized act is openly and promptly disavowed and opposed, in the mode pointed out by the constitution and the laws, the moment that an attempt is made to give it the form of a contract.

It is objected that the Governor is not subject to this form of our jurisdiction. It is far from

our intention to claim the power to control him in any matter resting in Executive discretion. But the rule of law seems to be that when the Legislature proceeds to impose on an officer duties which are purely ministerial, he may be coerced by mandamus or restrained by injunction, as the rights of the parties interested may require. In such a case no individual in the land, however high in power can claim to be above the Law. This rule is sustained by the cases of *Mathury vs Madison*, 1 Cranch, 137; *Griffith vs. Cochran*, 5 Binney's Reports, 87; *Commonwealth vs Cochran*, 6 Bing. 456; *Commonwealth vs Cochran*, 1 S. & R. 473. It seems to us that the sale of the property of the State at auction, is not a part of the Governor's constitutional duty as Chief Magistrate. It is very probable that the Legislature have no power to impose any such duty upon him. But if he consents to perform a ministerial act, the judicial power to administer justice and restrain against acts contrary to law cannot thereby be ousted or evaded. And if it be shown that the act under which he claims authority to dispose of the public property, or to divest private rights, is unconstitutional and void, he may of course, like any other individual, be restrained from proceeding. But we have too much respect for the office to resort to this measure unnecessarily, and quite too much respect for the incumbent to suppose that any such proceeding will be necessary after the opinion of this Court is pronounced.

There is no constitutional objection to the repeal of the tonnage tax, or any other tax, whenever the Legislature, in the exercise of their own discretion shall think proper to pass such a law. The objection is to the sale of the taxing power in such a way as to put the resources of the State out of the reach of future legislatures, should the public necessities require to resort to them.

There is no legal objection to the sale of the Main Line, nor to the right of the Pennsylvania Railroad Company to become a competitor and purchaser, upon equal terms with every other person or corporation. The objection is to that part of the *proviso*, in the third section of the act of 16th May, 1857, which requires the Pennsylvania Railroad Company to bid \$1,500,000 more than any other bidder, and, in a consideration thereof, proposes to release the said Company; and also the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company for ever, from the taxes therein stated. The injunction is to be awarded merely to prohibit a sale of the Public Works upon these terms. All other parts of the act are constitutional, and there is nothing to prevent a sale to the Pennsylvania Railroad Company, or any other corporation, or person or persons, under the general provisions of the act.

#### ORDER.

It is ordered that upon the complainants, or either of them, filing a bond in the penal sum of one thousand dollars, with sufficient sureties to be approved by this Court, or any Judge thereof, conditioned to indemnify the defendants from all damages that may be sustained by the injunction granted on this motion, an injunction be awarded, commanding the Pennsylvania Railroad Company and its officers and agents named as defendants in this bill, to make no bid for or purchase of the Main Line of the Public Works under that part of the proviso in the third section of the act of 16th May, 1857, which requires the said Company to pay in addition to the purchase money at which the Works may be struck down, the sum of one and a half millions of dollars, and in consideration thereof assumes to discharge forever the said railroad company, and also the Harrisburg, Portsmouth, Mount Joy and Lancaster Railroad Company the payment of all taxes upon tonnage and freight over said railroads; and also to relieve the said Pennsylvania Railroad Com-

pany from the payment of all other taxes or duties on its capital stock, bonds, dividends or property, except for school, city, county, borough or township purposes. And also commanding the said Pennsylvania Railroad Company, and its officers and agents aforesaid strictly to abstain from accepting any assignment on the terms stated in the aforesaid part of the said proviso, or executing or delivering to the Treasurer of the State any bonds of the said Company, for any greater amount than the sum at which the Main Line of the said Public Works may be struck down at a public sale, on a fair and equal competition with all other bidders. And also commanding the said Pennsylvania Railroad Company and its officers and agents aforesaid, strictly to abstain from accepting any transfer of the said Main Line of the Public Works from the Secretary of the Commonwealth under the great seal of the State, founded upon, or in consideration of any purchases upon the terms herein prohibited. And also commanding Henry S. Magraw, the Treasurer of the State, strictly to abstain from accepting the delivery of any bonds executed by the said Pennsylvania Railroad Company upon the terms herein prohibited, or for any greater amount than the sum at which the said Main Line of the Public Works may be struck down at a fair public sale of the same, upon equal terms to all persons and corporation desiring to purchase.

And also commanding Andrew G. Curtin, Secretary of the Commonwealth, strictly to abstain from making any transfer of the said Public Works under the great seal of the State, upon the terms herein prohibited, or for any greater amount than the sum at which the said Works may be struck down at a fair public sale as aforesaid.

This Injunction to remain in force until hearing, or the further order of this Court.

Opinions were delivered by Judges Knox and Lowrie in regard to the power of the Legislature to exempt corporations from taxation.

**CROSSING OF RAILROAD TRACKS.**—The Court of Appeals, New York, lays it down as a rule of law, that an individual on approaching a railroad track is bound to look if a train is approaching. The Court says:

Railroads are among the best improvements of the great age of progress. Public accommodation, convenience, trade, commerce, and the intercourse between one section of the country and the other, carried on upon railroads, demand that the greatest facilities should be given to this method of conveyance and the highest attainable rate of speed licensed. A railroad is a public affair, and none the less so because it is constructed and operated by private capital and enterprise; and the permanent affairs of the public are not to be postponed to the concerns of individuals. In view of the great rate of speed demanded upon railroads by the spirit of the age, and constituting one of the great advantages of railroad traveling, and in view of the imminent danger from collisions to the lives and limbs of the thousands of persons adopting this method of traveling, I hold that no one has the right to cross a railroad track without first taking every precaution to safety. The same reason that holds railroad companies to the strictest responsibility to the passengers, imposes upon every one who crosses the track of these great public thoroughfares, more than ordinary care to jeopardize the lives of those who are availing themselves of the benefit of this great modern improvement in the mode of traveling. It seems to me that he who, without pausing or even looking, will drive upon a railroad track, is guilty of more than carelessness.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rt.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds.	Name of Company.	Quot' of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp'sar	173		5,000,000.00				
498,800	0			1862-3	2d "	.....	Androsco'g'n & Kennebec	54.55		1,400,000.00		209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	86.5		1,000,000.00	199,000.00	278,423.74	173,780.74	4 pr. ct. 6m
52,646				now	"	.....	B'ng't, Old T. & Milford...	12.5		135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53
500,000	6		N. Y.	1860	"	.....	Boston & Worcester...	44 5-8		4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4, 6m
500,000	7			1866	1st mortgage.	.....	Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000	7			1857-9-62	Income.	.....	" " "							
200,000	7			1804	Domestic.	.....	" " "							
577,197	6			1872	4th mortgage.	.....	Central Ohio.	30						
192,200	7			1874	2d "	.....	Champl'n & St. Lawrence	43		1,872,800.00	1,001,087.00	165,200.00	77,700.00	10 per ct.
360,000	7				Domestic.	.....	Ch'r'l'te & South Carolina.	110		1,700,000.00	280,000.00	291,219.86	47 per ct.	\$72,300
1,140,000	6-7-8		N. Y.	1864-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	138		3,746,900.00	3,114,000.00	1,035,183.00	571,725.23	15 pr. ct. 6m
1,300,000	8			1868-9	2d "	.....	" " "							
374,000				1868-76	Convertible.	.....	" " "							
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa.							
532,000					2d "	.....	Cin. Will'ng'n & Zanesville	5	13 1/2	1,761,149.16	2,241,500.00	221,491.95		
104,000					3d "	.....	" " "	25						
305,500					Income.	.....	" " "							
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	103 1/2	139	4,741,220		1 3,754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning.	85		1,500,000.00				
400,000	7			1861	2d "	.....	" " "							
0,000 0	6			1873		.....	Cumberland Valley	52		1,218,300.00		160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	52		1,000,000.00	1,000,000.00			
350,000	7				1st mortgage.	.....	Eastern Railroad.	93 6-10		3,345,000.00		665,578.79	288,077.84	\$234,133
740,000	10			1869	1st mortgage.	.....	East Ten. & Virginia.	130		625,450.00		30,897.30	19,692.30	
88,000	10			1861	2d "	.....	Essex Railroad.	20		700,000.00				
400,000	7			1864	1st mortgage.	.....	Evansville & Crawf'd'vie	109		2,228,657.0		243,970.42	136,061.90	\$133,281.45
200,000	10				1st mortgage.	.....	The Fitchburg (Mass.) R.R.	681		3,540,000.00		681,169.52	213,837.81	2 per cent.
100,000	6				1st mortgage.	.....	Fox River Valley.	33		800,000.00				
100,000	6				1st "	.....	Fair Haven Branch.	15		300,000.00		50,381.33	14,822.45	\$166,240.00
300,000	6				1st "	.....	Georgia RR & Banking Co	233		4,156,000.00		1,068,202.59	357,689.42	\$166,240.00
4,000,000	6 1-9			1858	1st "	.....	G't Falls & Conway R.R.	90		4,181,550.00		2,068,836.00	176,529.95	8 pr. ct.
2,000,000	7			1869-70	st "	.....	G't West'n R.R. of Can.	28 1/2		2,000,000.00		339,196.50	176,529.95	
1,812,000	7			1860	2d "	.....	Houston & Texas R.R.	74		4,000,000.00		1,924,282.44	718,037.40	
12,865,000	7			1875	3d mortgage.	.....	Hudson River.	144		4,000,000.00				
4,115,000	6			1870	1st "	.....	Illinois Central R.R.	194		18,433,376.00		1,476,035.27	1031,489.08	7 pr. ct.
3,000,000	7			1860	Freeland.	.....	" " "	704		3,538,376.00				3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.	.....	Indiana Central.	48	72 4-			354,571.00		
700,000	7	Jan. & July 1		1862	2d "	.....	" " "							
50,000	7				1st "	.....	Iron R.R.	13		123,700.00				
700,000	7				1st mortgage.	.....	Kentucky Con. 2d Div.			719,500.00				
						.....	Knoxville & Kentucky.							
						.....	Laurens (S. C.) R.R.	32		166,000.00		23,233.59	14,233.59	
						.....	Louisville & Nashville.	184						
						.....	Lowell & Lawrence	12 3/4		300,000.00		50,244.71	14,149.13	\$2,000
						.....	Mad River & Lake Erie.			2,697,090.00		587,236.57	162,277.50	10 pr. ct.
				1866	2d "	.....	" " "			2,697,090.00				
				1875	3d "	.....	" " "			2,697,090.00				
					1st "	.....	Manchester & Lawrence.	26		1,000,000.00				\$24,000
				1868	1st "	.....	Marietta & Cincinnati.	19 1/2						
				1874	2d "	.....	" " "							
				1867	1st "	.....	Mexican Gulf R.R.	27						
					1st mortgage.	.....	Milwaukee & Horicon.	30						
				1881	1st "	.....	Mineral Point R.R.	32						
				1-68	2d "	.....	" " "	32						
				1884	1st "	.....	Mobile & Ohio.	497		10,000,000.00		253,498.96	162,802.24	
					1st mortgage.	.....	Nashua & Lowell R.R.	15		600,000.00		191,752.42	55,591.74	7 pr. ct.
				1869	1st "	.....	Now Haven & Northm'tn	55		922,500.00				2 pr. ct. 6m
					Con. till 1859.	.....	New York Central.	80 1/2	555	23,067,400	14,763,892	7,707,348	3,669,481	3 pr. ct. 6m
				1864	1st mortgage.	.....	" " "	79				1,040,393.26		324,891.57
				1873	2d "	.....	N. Y. & Harlem R.R.	103 1/2	133	5,717,100.00			64,678.71	\$37,692.30
				1864	1st "	.....	" " "	25						
				1863	1st "	.....	N. Y. Prov. & Boston.	50		1,58,000.00		245,713.00	51,544.40	
					2d "	.....	N. Lon., Will'm'nto & Pal.	66		1,700,000.00		120,371.50		
						.....	" " "							\$25,000
						.....	Pontchartrain R.R.	5		500,000.00				
						.....	N. O., Opel's & Gr. T. West.	62 1/2		6,000,000.00		116,795.09	366,118.80	7 pr. ct.
				1873	2d "	.....	N. Y. & New Haven.	103 1/2		3,000,000.00		1,007,666.48		
				1-85	3d "	.....	" " "							
				1859	1st mortgage.	.....	North Western Va. R.R.							7 pr. ct.
					1st mog.	.....	Northern (N. Y.) R.R.	118		2,000,000.00		600,000.00		
				1877	1st "	.....	North Missouri R. &	19 2-				23,176.74	88,458.56	2 1/2 pr. ct.
				1860		.....	Norwich & Worcester RR	60		2,111,500.00		304,238.33		
						.....	" " "							
						.....	Ogd'n'sb'le, Clay't'n & Rome	94						
				1866	1st mortgage.	.....	Ontario, Simcoe & Huron	88 3-		2,957,500.00		289,690.10	137,875.93	5 pr. ct.
				1875	2d mortgage.	.....	Orange & Alexandria R.R.					276,639.02		
				1868	1st mortgage.	.....	" " "							
				1873	1st "	.....	Peoria & Bureau Val. R.R.	47		1,500,000.00				6 pr. ct.
						.....	Philadelphia & Trenton.	28 1-5		1,000,000.00				
				1861	1st mortgage.	.....	Portsmouth & Concord.	47						
				1864 to 1874	1st "	.....	Potsdam & Watertown.	76		2,000,000.00				
						.....	Rutland & Washington.	62 1/2		950,000.00		68,525.42		
				20 years.	1st mortgage.	.....	St. Louis & Iron Moun. R.R.	86		6,000,000.00				
					1st mortgage.	.....	Salem & St. Louis R.R.	168 3/4		400,000.00				
					1st "	.....	Snd'sky, Mans'd & Newk	116					19,050.64	
					2d "	.....	Sullivan Railroad.	26		500,000.00		75,246.06		
						.....	" " "						17,378.08	
					1st mortgage.	.....	Tennessee & Alabama.	145				39,586.44		11m. 1 pr. ct.
						.....	Terre Haute & Richmond	73		1,294,450.00				
				1861	1st mortgage.	.....	Toledo, Wabash & Western	212						
				1840	2d "	.....	Troy & Boston			1,000,000.00				
				1875	3d "	.....	" " "							
						.....	" " "							
					1st, 2d, 3d "	.....	Vicksburg & Jackson.	46					165,076.04	
						.....	Virginia & Tennessee.	215		3,000,000.00		322,048.60		2 pr. ct.
						.....	Westchester (Pa.) R.R.	31		165,000.00				
					1st mortgage.	.....	Wilmington & Manchester	171						
					2d "	.....	" " "							
						.....	Winchester & Potomac.	32						
						.....	Worcester & Nashua.	45 69.						



June 12th, 1857.

BONDS.

Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, with interest.....	80
Cincinnati, Hamilton & Dayton R. R. Co. 7 per cent. 1st Mortgage Bonds.....	60
Do. 2d do do.....	83½
Covington & Lexington R. R. Co. 6 per cent. 1st Mortgage Bonds.....	68
Do. do. 7 per cent. 2d Mortgage.....	67
Indianapolis & Cincinnati R. R. Co. 7 per cent. 2d Mortgage Bonds.....	80
Ohio & Mississippi R. R. Co. 7 per cent. 2d Mortgage Bonds.....	60
Hillsborough & Cincinnati R. R. Co. 7 per cent. 1st Mortgage Bonds.....	55
Covington & Lexington R. R. Co. 10 per cent. Income Bonds.....	65
Indiana Central R. R. Co. 10 per cent. Income Bonds.....	95
Marietta & Cincinnati R. R. Co. 7 per cent. Domestic Bonds.....	35
Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds, due 1866.....	85
Little Miami R. R. Co. Dividend Scrip.....	81 to
Cin., Ham. & Dayton do do inc. int.....	115
Indianapolis & Cin. do do do.....	70
Cincinnati 6s of 1884.....	82

## STOCKS.

Little Miami & R. Co.	90
Columbus & Xenia	90
Dayton, Hamilton & Dayton	90
Indianapolis & Cin.	68
Indiana Central	50
Covington & Lexington	50
Marietta & Cincinnati	18
Hillsborough & Cincinnati	18½
Mad River & Lake Erie	18½
Ohio & Miss.	12½
Junction (Ind.)	11½ to 12
Cincinnati & Chicago	8
Southern Pacific	\$3.00 for \$5.00 paid.
do do	1.75 for 3.00 "4
Farmers' & R. of Ky., ex-dividend.	115
Ohio Life 1 s. & Trust Co. Bank.	100

It is a work of time and thought. The main features of the country have been ably reconnoitred by the officers of the army, under the orders of the late distinguished head



of the War Department. But the particular route of this mail is yet to be selected.—Water tanks are to be opened, stations are to be built for the protection of the men, and stables for the animals. These stations are to be supplied with subsistence for the men and forage for the animals; for it cannot be denied that, whatever route be taken, more than one-half these stations will be in desolate regions, which will produce nothing, and must be supplied from a distance. All this is the work of time, and requires an outlay of money, time, and brains. Under judicious management and plenty of money it could be done in a year. But what would the end of one year bring to pass with a war with England or France? It would show this golden stream from California equivalent to an annual tribute to us of \$50,000,000 diverted from us and turned upon the western shores of Europe; San Francisco herself possibly paying tribute to the enemy to avoid being burned down, and the western States—California, Oregon, and Washington—alienated and disgusted with the country which had failed not only to give them the necessary protection, but failed to open the natural line of communication with them within their own territory, upon which they could fall back and resist their enemies by sea, and keep up their social and commercial intercourse with the centre.

Now for the accomplishment of this overland route, what is the sum appropriated? This great object of immediate necessity and tangible utility, one affecting the very integrity of the empire—what is the sum that Congress has voted? Not more than is voted for a single frigate or line-of-battle ship, sometimes left to rot at her moorings.

It is not generally known, but it is nevertheless true, that the Spanish government, in its days of power, previous to the revolution of her colonies in America, had a line of military posts extending across the continent from San Antonio de Bexar, Texas, to Pictic, in Sonora; and the remains of these posts are still in existence. Many of these ruins have been visited by the writer of this article, and it happened to him also to have been shown a manuscript by General (then Colonel) Langer, of the Mexican army, which manuscript, it is believed, is still in his possession, being the official report of a Spanish marquis (name forgotten) who was then in sole command of that extended frontier, and was responsible to none but the Viceroy of Spain, then resident in the city of Mexico. That report gave the locality of the stations, the amount and description of force at each place, and the periods marking the circulation of troops from post to post. It appeared that semi-weekly excursions were made from post to post, and the communication from San Antonio to Pictic was completed in every four or six weeks. This chain of post was alone for defence, and so complete was it that in the year 1797, when this report was dated, the general commanding announced the entire and absolute tranquillity of this frontier.

These were the palmy days of the interior of the continent, when single haciendas, some of which are now within the limits of the United States and deserted, numbered their 20,000 head of horses and 80,000 head of cattle.

Compared with the necessities of the Spanish monarchy at that time, how great are the necessities of this country for such a line of interior communication! The ques-

tion with them, which was purely one of defence, is with us not only one of defence equally binding, but involves great considerations of commerce, and, what has twice before been stated, probably the integrity of the Union itself.

If six millions of dollars had been voted instead of six hundred thousand to open this great line of interior communication, it would not have been one cent above the magnitude of the interests involved, or the expectations of those who look to the day when we, the white people, and not the miserable mongrel races of the interior, shall be not only the ruling power of the continent, but the possessors of it.

The subject is one too grave to be intrusted exclusively to the charge of private companies and individuals, and its protection should be intrusted to regularly-constituted corps of the army; which, in truth, are but the representatives of the whole country, and not the exponents of the will of any particular faction, locality, or corporation.

But we have before expressed the belief, derived from an extensive knowledge of the wants of the country, that the cavalry force is inadequate in numbers to supply the present demands for its services. It is believed that in no other army in the world is the cavalry arm called into such frequent, distant, and fatiguing service. In fact both men and officers live in the saddle; and while we have as fine a body of cavalry officers as perhaps exist in the world, the enlisted men of the cavalry have never had time to learn their duties as they should do before being sent in the field, and the consequence is, disgust with the service and desertion.

The remedy for this is simple enough—an increase of the mounted force of the Army. One would think, from looking at the composition of our army, that we were some small isolated Republic, girt in with a navigable sea; not that we had a great continent to span and vast territories to occupy, through which not a solitary stream flows susceptible of navigation, but which is teeming with the richest mineral wealth, undeveloped because of the insecurity to life and property in this yet unoccupied territory.

We have heretofore looked merely to the gold mines of California; but there are other interests yet undeveloped, and in the process of development, quite as vast as that interest. Of the first class, then, are the gold mines of New Mexico, the silver mines of Western Texas, and that vast region of silver-bearing rocks yet untouched which is described in the report of the Mexican-boundary commissioner, which is about being published; of the second class are the rich mines of San Pedro and Chihuahua partially developed—sufficiently so, however, to place beyond doubt that they exceed in richness some of the mines which are now classed amongst the most productive in the world.

Nothing has been said here in reference to the scheme of giving protection to this overland route by grants of land to actual settlers; but, when the time comes to this proposition, it is believed such a view can be given of the physical geography of the country to be traversed, no matter what line is followed, and of the actual state of the land and its present occupants, as to show conclusively that this scheme of protection is wholly inadequate, and can never be successful. It is believed too, that it can be shown that this very scheme has already received a fair practical trial, and been found wanting.

### The English Railway System—Its Cost and Profits

Three hundred millions of money, (1,500,000,000), at the very least, have been invested in the Railways of this country. There are thousands of men still living who can recollect when the whole National Debt of the kingdom, though then considered incredible, was but 240 millions, and even now the figures symbolizing railway property represent an amount equivalent to one-third of our prodigious State obligations. Now, when it is asserted—no doubt with substantial accuracy—that the average profit upon these investments in this tranquil, prosperous, and well governed country is only £3 12s. 4d. per cent and that of all the railways established and at work, three only have their shares quoted at a premium, nobody will deny that the proprietors, if not an ill-used, are certainly an unfortunate body; nor are we in the least degree disposed to wonder or complain at the agitation which they seem to be preparing, and which they inaugurated at the metropolitan meeting reported in our columns of yesterday. There is no need for expatiating on the "widow's annuity," or the "orphans patrimony," or any other particular investment appealing with special force to public sympathy. All this is comprised in the bare mention of the aggregate at stake. Hundreds of millions could not possibly be subscribed without the destinies of thousands of families being involved in the success of the venture. It is equally manifest that in the security and productiveness of such a mass of property the interests of every individual in the community must be more or less concerned. Nobody can doubt the reality or magnitude of the evil; the only question is as to its cause, and as to the remedy which can be most hopefully applied.

We can readily excuse the splenetic force of expression in which the sufferers depict what they consider their grievances, and in some respects their protests are undoubtedly well founded. It was certainly hard upon railway shareholders that they should be visited at once both with legislative control and unrestricted competition. From one, at least of these conditions they might have expected to be spared. When the State grants a monopoly it should, of course, see to some equity of dealing between the monopolist and the public; but, when it leaves those dealings to find their level by the natural operations of trade, direct intervention assumes a gratuitous and oppressive aspect. Railway shareholders complain that legislation which controls their proceedings, regulates their prices, and limits their profits, should also expose them to the risk of being undersold by competing lines, and their expostulations are so far reasonable enough. It cannot be denied, in fact, that our whole policy in these railway transactions would have admitted of incalculable improvement if we could have brought the experience of 1857 to the deliberations of 1845. Money might have been saved in all quarters alike, proprietors might have had heavier profits, passengers better accommodations at lower rates, and the country at large a greater amount of benefit. In justice, however, to the statesmen and legislators of those days, it must be remembered that the question was entirely new, while the fault charged to their account, amounts, after all, to little more than an omission of control over those very bodies who now complain of the results of freedom. It is not fair to say that the extravagance of enterprise and competition was the



immediate work of our rulers; these elements of mischief were supplied by the speculators themselves, and all that the Government neglected was the restriction of this exuberance within what, as is now discovered, would have been more salutary bounds. Yet it is by no means improbable that if a policy of repression had been actually adopted it would have been held accountable for all the mishaps and deficiencies afterwards experienced, and the late Sir Robert Peel might be denounced, perhaps at this very moment, as the arch obstructor of railway development in England.

As regards the minor grievances alleged on behalf of railways, there is not quite so much to be said. If they are heavily rated for the relief of the poor, it must at any rate be plain, after recent discussions, that there is plenty of other property in the same case. If they are undersold by the Post Office in the parcel-carrying department, the fact is only an unavoidable incident in the progress of public accommodation. The Post Office has machinery pervading every quarter of the kingdom with its ramifications, and to expect that this machinery should be withheld from the service of the public, in order that railways might have more parcels to deliver at such stations as they touch, is utterly preposterous. Still more injudicious was the complaint that companies should be charged so heavily for their dealings with the lives and limbs of Her Majesty's subjects, while, as regards the limitation of profits so feelingly put forth, if the course is clear up to 10 per cent., and the average performance at present is under 3½, there is surely scope for about as much expansion as can be anticipated just yet.

However, we are not concerned to gainsay the assertion that Railways have here and there been hardly treated, and certainly we should rejoice to see this immense aggregate of property producing better returns, and bearing a more becoming value in the market. But, after saying this much; we are bound to add, that a very considerable portion of the hardships alleged is traceable to the conduct of the companies themselves. In what respects indeed—to go at once to the very marrow of the question—have Railways disappointed their proprietors? Certainly not in the amount of receipts, for, as regards the returns per mile from goods and passenger traffic, we doubt if there is a single line in the kingdom which has not exceeded the most sanguine estimates of produce originally formed. The public, then, have done all and more than all their part in the way of encouragement; they have been most liberally forthcoming with their patronage and their money, and the only reason why profits are small is, that those returns are intercepted in their way to the pockets of the shareholders by the enormous claims which must be satisfied before any dividend can be declared. The simple truth is not that fares, as a general rule, have been pushed too low by competition—not that traffic has been abstracted by a carrying department of the Administration itself—not that mail bags are conveyed at a loss—not, in short, that anything keeps money out of the railway tills—but that too many mouths have to be filled from the produce before the actual proprietors can come in for their turn. The receipts, in short, of Railway Companies are abundant, and would be remunerative enough in most cases, even after working expenses had been defrayed:—what impairs the dividend is not the smallness of the division total, but the number of the divisors! And

what created this hungry multitude? Why, the greed, the ambition, the conflicts, and the litigation of the companies themselves, which so swelled the capital on which interest was to be paid that even an unexpected fertility in returns has proved insufficient for the objects desired.

There is another point, too, which cannot be passed over without destruction to the soundness of the whole argument. Why is it that property which, if not so productive as it ought to be, is at any rate producing upon an average between 3 and 4 per cent., should be quoted at such disproportionate prices in the share market? Very likely £3 12s. 4d. is too small a rate of interest, but it is higher than Consols, and the security is only inferior in its character to *terra firma* itself. Nothing advanced at the meeting explained the ugly fact that of all these numerous creations three only were quoted at a premium. This fact can be interpreted only by the indefinite distrust to which uncertainty gives rise, and this uncertainty in the public mind is due to the obscurity of railway accounts. Nobody knows the exact truth, and the want of knowledge has a worse effect than the truth could have, if it were ever so bad. Let the worst be known, and men will soon come forward to make it better, for this is proverbially the point at which things mend. Provided there was nothing behind the scenes—no mischief to come out by and by when all was thought to be over—the natural and unvarying elasticity of such property in a country like this would soon be reckoned upon to bring things round. The road to a rise in shares lies through a real and incontestable audit.

In the main, the improvement of railway property must rest with the shareholders themselves. If there are any points on which legislation presses them unfairly, they will have the good wishes of the public in agitating for redress, and, independently of such points, if the authority of Parliament can enable them in any way to act more effectively for their own relief, we trust that they may obtain the facilities desired. The aggregate and taxable wealth of the nation, as was observed at the meeting, is affected by the depreciation of funds so enormous, and the question assumes an importance truly imperial. But even Parliament itself cannot recall what is past, and the counterpoise is only to be found in good management and resolution. Let the companies first deal as liberally with the public as the public does with them: not stint their accommodation, not cut down their working staff, not curtail the very indulgences to which they are driven. If they are forced to carry a passenger 60 miles for 5s., they need not expose their ill will and their caprice by charging 7s. 6d. for one-half of the identical distance. Let them abstain of their own accord from slashing at each other's throats, and not pray the Legislature to make them well-behaved by compulsion. Above all, let them look boldly into their own affairs, and give the public the benefit of their discoveries; and if they do this for themselves, they will do more than "a strong government, and a willing Parliament," and even "Lord PALMERSTON" himself can ever do for them.—*London Times, June 5th.*

Six persons were killed by lightning, on Sunday week, in the vicinity of Menclota, on the Illinois Central Railroad, by a single bolt.

#### TERRIBLE ACCIDENT IN SWITZERLAND.

The following are some details of the accident at the Hauenstein Tunnel, contained in a letter from Basle of the 4th:

"The Hauenstein Tunnel is on the centre railway which unites Basle to Aarau, Lucerne, Berne, and other towns in the neighborhood, and is five kilometres (about three miles) in length. The cutting of the tunnel, having been commenced at both ends, progressed satisfactorily until only about three hundred metres remained to be pierced. In both sections are several shafts for extracting earth and letting in air, and in the northern one, one of the shafts bearing the No. 1, which is about eight hundred metres from the spot where the works are going on, was supported by solid wood work to prevent the fall of earth and stones. In the tunnel a fire was constantly kept up in order to increase the circulation of air, and at the very bottom of the shaft a forge was established. The wood work of the shaft became extremely dry, and at last on the 28th ultimo, it caught fire.—The flames shot up with extraordinary rapidity, and set fire to all the wood-work in the shaft, which was not less than two hundred metres deep.

A column of flame rose high above the shaft, forming a terrible spectacle. After a while a thick column of smoke succeeded the flames, and indicated that the bottom of the shaft had fallen in, and that consequently the retreat of the laborers, whom it had been impossible to warn, was cut off. To describe the scene of anguish that ensued would be impossible. People rushed in crowds to the entrance of the tunnel to render assistance to the victims, and they reached the mass of earth which had fallen in; but a large quantity of coal which had been collected near suddenly caught fire, and it created such volumes of smoke and gas that many were overcome and had to be dragged away by others; seven were dead, and a hundred others were got out in a pitiable state. At length something like order was established, the workmen being formed into gangs, who replaced each other every ten minutes. Fire engines were employed to throw chalk and water into the tunnel to extinguish the fire and neutralize the noxious gas, and pipes for conveying pure air to the workmen were established. The cutting of a gallery in the mass of fallen earth has been commenced, though the fire is not yet completely extinguished.

But no hopes whatever are entertained that any of the men buried will be got out alive, for though they had an open space of about eight hundred metres, and though in it there is a spring of water, and they had four horses which they might kill for food, it is certain that the noxious gas must have suffocated them. Of the fifty-four men buried thirty-one are Swiss, four English, and eighteen Germans. The wives of the English workmen who have perished have behaved in the most admirable manner, not only constantly encouraging those who were endeavoring to reach the unfortunate men in the tunnel, but attending carefully to such as suffered from their exertions.

"Since the above account was written intelligence has been received of the extrication of thirty-two dead bodies, but we regret to learn that sixteen of the laborers employed to open the gallery have perished by the poisonous vapors which were collected there, making the total mortality, with fifty-four men buried in the first instance, no less than seventy."



—MINNEAPOLIS & CEDER VALLEY R. R.—  
The surveys of this road have been commenced.

PITTSBURGH & CONNELLSVILLE R. R.—The following is a statement of the revenues of this road for the month of May:

Passengers to and from Pittsburgh, over the Pittsburgh and Connellsville R. R. .... \$2,564 50  
Local Travel..... 2,410 50

Total..... \$4,975 00  
—Divided as follows: East, \$2,617; West, \$2,358.  
Freight shipped for Philadelphia..... 217,886lb  
do Baltimore..... 63,000lb  
do Pittsburgh..... 2,704,032lb

Total..... 3,684,938lb  
—or over fifteen hundred tons. The swollen condition of the streams has rendered the Monongahela and Youghiogheny rivers competitors for freight, and has operated somewhat on the local freight along the slack-water.

### Railroad Crossings Law of Wisconsin.

Published June 19, 1857.

AN ACT concerning Railroads. The People of the State of Wisconsin represented in Senate and Assembly, do enact as follows:

SEC. 1. All Railroad Companies in this State, wherever the track crosses a public highway, shall put up or cause to be put up large sign boards, over such highways, with the following inscription on both sides of such boards in large letters:

#### LOOK OUT FOR THE CARS.

In all incorporated cities the said company shall cause the bell on the engine to be rung before crossing any of the streets of a city, and their trains shall not go faster until the same have past all traveled streets of such city, than at the rate of six miles per hour.

SEC. 2. The sign boards required to be put up by the foregoing section shall be erected on all the railroads in this State within six months from and after the passage of this act.

SEC. 3. If any railroad company shall refuse or neglect to comply with any of the foregoing provisions of this act such Railroad Companies shall upon conviction be punished for each and every such offence by a fine not exceeding fifty dollars, such fine to be recovered against any such Railroad Company in any court of proper jurisdiction, and such fine when collected shall be paid into the Treasury of the proper town or city.

SEC. 4. This act shall take effect and be in force from and after its passage and publication.

Approved, March 6, 1857.

COLES BASHFORD.

### FOR SALE.

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

### Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Sup'l.  
Racine, May 15, 1857.

### RAILROAD IRON.

500 TONS best quality Welsh Rails, 5 lbs per lineal yard, now on the way from Great Britain; for sale by VOSE, LIVINGSTON & CO., 9 South William street, N. Y. July 31

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON, No 13 10 Wall st., near Broadway, New York.

### Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 17] Agent.

### PRATT & FREEMAN. PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St., PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF Locomotives, Passenger, Mail, Baggage, Freight, and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts, Rivets, and Washers, Cast and Wrought Iron R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam and Hand Water Pumps,

Machinery and Machinists' Tools, Portable and Stationary Engines, Planing and Borin Machines, Lathes, Chucks, Drills, Files, and all required

#### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber Hose, &c., India Rubber, Hemp, and Cotton Packing, Miller's, Radley & Hunter's, Porter's, Williams', and others

LOCOMOTIVE HEAD-LIGHT, Station, Bridge, and Switch Signal Lights, Conductor's Arm, Breast, and Hand Lanterns, Brass, Bronze, and Silvered Car Side Lamps and Candelsticks, Brass and Tin Globe and Egg Guarded

#### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

#### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets Bands, &c.

Steam and Water Gauges, Spring Balances, Cylinder, Gauge, Heater, and Air Cocks,

#### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders, Patent Brass and Tin Oil Cans, Copper do., Dudgeon's, Burroughs', and Ball's Patent Jack Screws Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains, Burning and Lubricating Oils, White and Yellow Car Grease, &c., White, Colored, and Mixed Cotton

#### WASTE,

Baggage Barrows and Checks, Freight Trucks, CAR FINDINGS, Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

ORDERS SOLICITED AND PROMPTLY FILLED. oc23-1y

### ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE OF, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

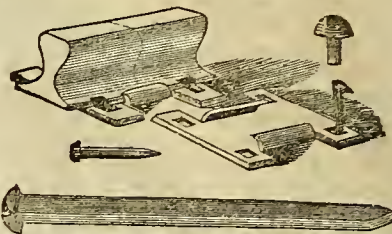
Also, for Water Gauges, Indicators, Steam Whistles CHAS. W. COPELAND, Consulting Engineer, 64 Broadway, N. Y. Nov

### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 5<sup>8</sup> to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO., 9 South William street, N. Y. feb19-1m

### GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio. Please direct name in full. feb 25 CORBY, GOSSIN & Co.

### SILVER, GOLD, LEAD,

And Other Minerals,

ON THE PROPERTY OF THE

### Sonora Exploring and Mining Co.,

NEAR TOMBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast future estates.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company, Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE &amp; CRAWFORDSVILLE, and the TERRE HAUTE &amp; ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

July 10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

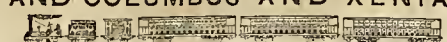
THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatcher Double Setting Hand Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio.  
LEE & LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	29 "
To Washington in.....	28 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Office.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

July 2

1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:30, 4 and 6:30 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities.—Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M., INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M., MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburgh, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, EAST EXPRESS, via Clyde, through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:30 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:30 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8 A. M., and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 6:15 and 10:25 P. M.

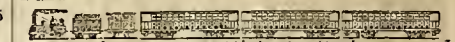
For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 10 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntingdon, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Frtght. Ag't.

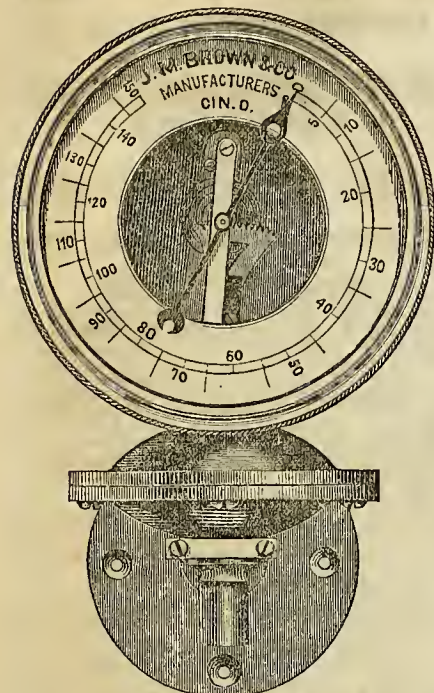
Indianapolis, Sept. 16, 1856.

[mh29-1y.]



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

### FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,

250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

### DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Seal-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pat Lever Wrenches and Wrought on Blacksmiths' Tuggers.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
83 PLATT STREET, New York.



## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage. Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

### LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of

### LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES, From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St., PHILADELPHIA.

## RAILROAD IRON.

### LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.]

H. GOODMAN & CO.,  
No. 7 Wall st., N.

## RAILROAD CAR

AND

### COACH TRIMMINGS.

## DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

### IMPORTERS

OF

Plain and Figured Mohair Plush

Printed and Unprinted, Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

### PATENT FELT.

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in hand for exportation Sept 18

DOREMUS & NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

Maps and Reports furnished; Researches made for

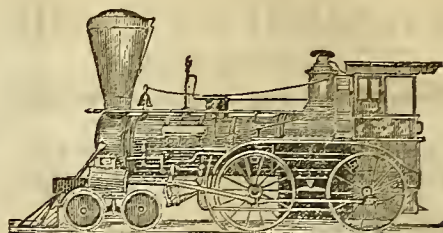
Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.

mar 1-ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

### BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

### Cotton Duck for Cr Covering,

Of any required width to 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
1866.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

## Sole Manufacturers of McGowan's Double Action SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps at the Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1853.

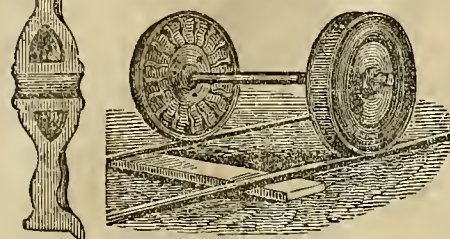


## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

## WASHBURN WHEEL

Having obtained the exclusive right to make this wheel



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



## DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

## CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

## WASHBURN WHEEL.

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

## BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Janl. Muskingum Works, Zanesville, O.

J. DAVENPORT, ... M. D. WELLMAN, ... C. M. RUSSELL

## DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,  
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* JOSEPH DAVENPORT.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,  
Cor. Railroad Avenue and Market st.,  
1 n2t NEWARK, N. J.

## ALBERT M. SMITH'S

## PATENT PREMIUM RECLINING & SELF-ADJUSTING CAR SEAT



For a Night and Day High or  
Low-back Seat, combined in one,  
PATENTED AUGUST 21, 1855.

It was awarded two first premiums, a Gold Medal, at the great Fair at the "American Institute," held at N. York, and a Diploma at the State Fair, held at Elmira, N. Y., 1855.

This valuable improvement is adapted and can be applied at a very trifling expense, to the ordinary seat now in use, without impairing its present qualifications as a day seat, and a new seat provided with it and made in single seats, costs no more than the ordinary seat.

By an arrangement that is very simple, and not liable to get out of order, the back is so hung at points, varying from the centre, that it can be converted into a High-back Night Seat, by pushing against the upper part of the back, which disconnects the lower part, and allows the sides to be reversed, the outside placed in, which is the natural form and shape of the person, and raised high enough to support the head, this slides the seat forward on a curve, so as to be in conformity with the angle of the back, and it is then self-adjusting to any position of the person, and cannot be moved from it by the sudden motion of the Cars, making a seat as perfectly adapted to its intended use (as a High or Low Back) as if made especially for it, and no other.

The Seat can be seen and examined, and orders will be received for the improvement, to apply to old Seats or for new Seats, at the Office of ALBERT M. SMITH, Patentee and Manufacturer, dec20-1y 13 North St. Paul st., Rochester, N. Y., or TAULMAN & LOW, 157 Broadway, N. Y.

## RAILROAD IRON.

THE undersigned, Agents for the Manufacturers, are prepared to contract to deliver free on board, a shipping parts in England, or at ports of discharge in the United States, Rails of superior quality, and of weight of pattern as may be required.

VOSE, LIVINGSTON & CO.  
New York, Ap 3, 1856. 9 South William Street.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

## BUSH & LOBDELL

Wilmington - - - - - Delaware

MANUFACTURERS OF

## CHILLED WHEELS

AND

## TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

## CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

J. T. CRAPSEY,  
ATTORNEY AT LAW,  
OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.). 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
President of the Board.

## E. MENDENHALL,

## MAP, BOOK & PRINT SELLER,

Has constantly on hand

GUIDE BOOKS OF ALL KINDS, SCHOOL APPARATUS, and

OUTLINE MAPS.

Anatomical Charts, Atlases and Gazetteers,  
Geological and Astronomical Charts, Globes,  
MICROSCOPES, TELESCOPES  
DRAWING INSTRUMENTS, &c.

Publisher of the

Railway Map of the Western States,  
In Sheet or in Pocket Case;

The LARGE SECTIONAL and RAILWAY MAP OF OHIO  
the LARGE MAPS OF CINCINNATI, and HAMILTON CO.  
Ohio, and the TOWNSHIP MAPS OF INDIANA and IOWA  
MAPS OF EVERY DESCRIPTION.

mh22

## RAILROAD RECORD,

BOOK & JOB PRINTING OFFICE,

167 WALNUT STREET,

Between Fourth and Fifth Sts. Cincinnati.

Harlan & Hollingsworth,

WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

oc2

## Rawdon, Wright, Hatch & Edson,

BANK NOTE

## ENGRAVERS AND PRINTERS.

Is engraved in a style corresponding in excellence with that of Bank Notes—

## RAIL ROAD, STATE, AND COUNTY BONDS,

BILLS OF EXCHANGE, CHECKS,  
Bills, Certificates of Stock and Deposit, Promissory Notes, Bill and Letter Heads, Visiting and Professional Cards, Notarial, County and Hand Scales, &c., &c.

Constantly on hand, Bank Note Paper, made to order a superior quality.

he above office is under the supervision of  
GEORGE T. JONES,  
South-East corner of Main and Fourth Sts., Cin.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Comper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-1y

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb5-1f 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.****JAMES HARRISON JR.'S****Automatic Steam Whistle,****FOR LOCOMOTIVES.****PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point at which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

dec11 Second avenue, corner of 52d street, N. Y.

**T. F. RANDOLPH & BRO.****Mathematical Instrument Makers,****N. W. Cor. 5th & Walnut sts.,****CINCINNATI, O.****Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

**RAILROADS, STEAMBOATS,**  
**AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE &amp; CO.,

jan8 1y 119 Walnut st., Odd Fellows' Building;

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE****RECORD AND COPYING FLUID INKS.**

edgers &amp; Records only. For Books, Letters, &amp;c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,**  
**STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,****No. 112 MAIN STREET,****East Side, between Third and Fourth Streets.**

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

**RAILROAD AND OTHER BLANKS.**

Printed to order in the best manner.

**Rolling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

**ARE** prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

**PLATE CAR WHEELS** and **CHILLED TIRES** equal to any produced in the country.

**WHEELS AND AXLES** fitted for use.**HYDRAULIC PRESSES** for pressing Oils and for other purposes.**MACHINERY** of the most approved construction for Flouring and Saw Mills.**GAS HOLDERS** of any size, and Machinery and Castings of all kinds for Gas Works.**STEAM BOILERS** and **WATER TANKS** of any size or description.**SHAFTING, PULLIES** and **HANGERS.****WROUGHT IRON PIPE** and **FITTINGS** constantly on hand, and fitted up to order.

ap3

**Morley's Patent Railroad Chair.****PATENTED JUNE 2D, 1856.**

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.

ap8

Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C.

ap12

**Thorough Bred Stock**  
**FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,****"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JULY 16, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " per month .....	3 00
" " six months .....	12 00
" " per annum .....	20 00
One column, single insertion .....	4 00
" " per month .....	10 00
" " six months .....	40 00
" " per annum .....	80 00
One page, single insertion .....	10 00
" " per month .....	25 00
" " six months .....	110 00
" " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 21.

#### EDITORIAL.

The Southwestern R. R.—A Link in the Great Mackinaw Road.....	333
Sonora Silver Mining Company.....	333
Brevities.....	334

#### RAILROADS.

Northwestern Virginia R. R.....	335
Cleveland & Toledo R. R.....	337
Alabama & Florida R. R.....	339
Houston & Texas Central R. R.....	342
Philadelphia & Baltimore Central R. R.....	342

#### MISCELLANEOUS.

Norman House and Park.....	341
Atlantic Telegraph Cable.....	343
Present State of the Bessemer Iron Question.....	343
Previous Sales of State Works.....	343

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	340
London Quotations.....	341
Monetary and Commercial.....	341
Sales at the New York Stock Board.....	341
Cincinnati Stock Sales.....	341

### ITEMS.

Eight thousand tons of rails and two locomotives have recently been purchased for the Hannibal and St. Joseph Railroad, the completion of which is now said to be secured.

The Schuyler *Citizen* states that the contract for the completion, within two years, of Peoria and Hannibal Railroad has been let to Messrs. Morris & Easterbrook, who take \$300,000 in stock of the road.

The Stevens' Point (Wis.) *Pinery* states that the contract for the completion of the Milwaukee & Horicon Railroad to that place has been let, and the work will be pushed forward with vigor.

According to the Quasqueton (Min.) *Guardian*, about \$400,000 have been subscribed by Buchanan county (by vote) and by private individuals toward the construction of the Wapsipinicon & St. Peter's Valley Railroad.

Sufficient iron to finish the track-laying on the Iowa & Nebraska Railroad, from Clinton to DeWitt, has been received at the former place, and the cars have already commenced running between those two towns.

The Dubuque *Northwest* states that the Illinois Central and Dubuque & Pacific Railroad Companies are to build an extensive Union Depot in that city, and have also determined to erect a bridge across the Mississippi at that point.

### THE SOUTHWESTERN R. R.—A LINK IN THE GREAT MACKINAW ROAD.

Mr. TALCONNET, engineer, and Mr. CLARK, contractor, are in Cincinnati, asking the countenance and aid of its citizens in favor of constructing the *Southwestern (Tenn.) R. R.* As this is a work we have more than once spoken favorably of heretofore, and as we regard it of great importance, we shall take this occasion to say something of its merits. The *Southwestern Railroad* is to be from McMinnville to the Kentucky line, 83 miles. At the Kentucky line it will be continued to Danville, 80 miles, which will complete the distance from Cincinnati to McMinnville—in all, 295 miles. Now, if the reader will cast his eye over the map, he will see that this line from Danville to McMinnville is a *link*, and an essential one, in the entire line from Mackinaw to Pensacola, through Cincinnati. We have before pointed out the immense importance to this entire nation of a railroad line from the Straits of Mackinaw to Pensacola; but it will be well for us to recur a moment to the outline of that scheme. Mackinaw is the extreme Northern point of the United States *accessible to the Central West*. It is one of the most commanding points in the country for internal navigation. It can only be reached through Michigan, and its nearest line to the valley of the Ohio is the direct one to Cincinnati. So, on the other hand, Pensacola is in the extreme South; it is one of the best harbors in the country, and opens out on the Gulf of Mexico so as to command its whole commerce. Here, then, we have two extreme points, North and South, which are admirably situated for commerce, and to connect which by railroad would traverse the very center and heart of the United States, with an *AXIAL LINE* of 1,250 miles. Now it so happens that this line must pass *directly through Cincinnati*, and that it is also a direct *North and South Line*. The consequence of this will be that at Cincinnati it would meet and intermingle the whole trade of the North and South through the interior States. No competing line to this can be made. It would stand alone in its character and resources. It extends through *twenty degrees of latitude*, and through States which produce every article of produce cultivated in America. Now it is very obvious that this road, if made, is to be of immense national importance. If, as some think, we need to increase our bonds of Union, nothing can accomplish it better than a Grand Axial Railroad which, *on the same day*, shall bring the inhabitants of North and South together, and show them, by a little practical intercourse, that the interest of one is the interest of the whole, and that they greatly misunderstand one another when they attribute disloyalty to either. For these great commercial and national reasons, we consider the construction of the Mackinaw & Pensacola Road as one of the certain facts of the future. This line,

when made, will be composed of a Michigan Line—perhaps two—to connect with Cincinnati by roads already chartered and constructing, through Greenville and Fort Wayne.

Secondly, by the Kentucky Central Road, which is from Covington to Lexington, Danville, and finally to the State line, joining with the *Southwestern*. Then by roads chartered and constructing to Montgomery, Ala.; and, *thirdly*, by the Montgomery & Pensacola Railroad. Now the only impracticable part, at least for the present, seemed to be the parts in Florida and Michigan; but, by recent Acts of Congress, granting lands to Michigan and Florida, it is supposed the parts in these States are entirely secure of construction. In fact, of 1,250 miles of the Great Mackinaw & Pensacola route, only the part of 163 miles, from Danville to McMinnville, appears to be in any doubt. Then we see the *Southwestern Road*, in this light, acquires an importance which does not belong to itself alone. If it can be made, the greatest railroad line in America will be made.

The Southwestern Railroad was chartered in 1853, and in 1854 WILLIAM BOSSON, formerly of Cincinnati, was its President. The ill-fortune of railroads was then commencing, and nothing could be done for the next two years. The *Southwestern Company* has, however, revived its spirit, and recommences with an amount of strength and favor which seems to promise it success. On the 2d July inst. a new President, Mr. Marbois, was elected, and a contract made with *Clark, Mastin & Co.* to complete 60 miles of the road.

The estimates for the road stand thus:

Grading, &c.....	\$971,000
Bridging.....	200,000
Superstructure, &c.....	896,000
Engineering, &c.....	70,000

Aggregate.....\$2,137,000

The means at the command of the company are:

Private subscriptions.....	\$200,000
State aid for bridges.....	200,000
State aid for superstructure.....	898,000

Total means.....\$1,298,000  
Balance to complete road.....841,000

The balance wanted is only 40 per cent. on the whole. Surely this can be obtained in the vast community to be benefited by the operation of the road.

### SONORA SILVER MINING COMPANY.

This Company was organized in Cincinnati, March, 1856, under the name of the SONORA EXPLORING AND MINING COMPANY. The object proposed by its projectors was to send a party to the northern portion of Sonora, which came into our possession by the Gadsden purchase, to search out and obtain ownership to some of the most valuable of the old Spanish mines, that were abandoned at the period of the famous Mexican Apache War. These, according to the tradition of the Mexicans, were within our boundaries, and afforded a legitimate object of pursuit to citizens of the United States. In pursuance of this design, the company, in



April, 1856, sent Col. C. D. Poston, a gentleman who in company with a scientific geologist, had already spent several years of time and a small fortune in investigating the mineral resources of the territory, with a party fully armed and equipped for any emergency. After careful explorations in the whole territory, the headquarters of the company were established at Tuhac, as the centre around which its operations would be performed. The explorations of the company have resulted in the acquisition of over eighty veins of silver ore, including over thirty mines that had been worked in previous times, and twenty thousand acres of land, which is valuable as well for its agricultural as its mineral resources. The number of mines now owned by the company, and all located within sixteen miles of Tuhac, is as follows:

At the Santa Rita Mountains, including the old Mines of Salero and Ojero,.....	24
On the Rancho de La Arivaca, usually called Arivaca, old mines,.....	32
At the Cerro Colorado Mountains, including the Heintzelman Mine,.....	29
At the San Coyetann Mountains,.....	2

Number of mines,..... 80

In addition to the above on the Arivaca Rancho, which was acquired by purchase, and contains over seventeen thousand acres of land, with permanent water and abundance of wood and grass, there are known to exist many veins which have not yet been opened, but the ownership of which belongs to this company.

#### VALUE OF THE MINES.

It is almost impossible to give an adequate idea of the value of the mines already acquired by this company, because they are as yet comparatively undeveloped, and the full extent of their richness unknown. It is a conceded fact, however, that the characteristics of the mines of Southern Mexico, which have given the nobility of that country their immense landed estates, were rather the abundance than the richness of their ores. That in many instances these mines were worked to a depth of thousands of feet, and still repaid their owners with immense fortunes every year. Ward states that Zambrano paid, as his tax of one fifth the proceeds of his mine, \$11,000,000. The mine of Arevalo, in 1811, yielded in seven weeks, \$200,000 from one level called El Divino Pastor. The Biscaina vein, which in 1726 had produced \$4,341,600, and was subsequently abandoned on account of water, was re-opened in 1762, and in twelve succeeding years produced \$6,000,000. The mines discovered by the Indian brothers Arauco, in the district of Morelos, in 1826, produced in two months \$270,000. In 1825, the owner of the mine of Nuestra Señora de Guadalupe refused \$1,000,000 for the privilege of working it three years.

The mine of Arevalo at Chico, is stated to have produced from 1804 to 1824, \$250,000 per annum. The mines at Real De Arriha in the district of Temascaltepec produced weekly twelve bars or \$13,000. The Santa Rita mines at Zimapan, upon the years 1791, 1792 and 1793 left a profit of \$100,000.

Humboldt estimated the whole produce of the Mexican mines in 1803, at \$1,767,952,000.

The enormous profits of the mines mentioned above, are well authenticated facts taken from

government records of taxation. They were accomplished with the rudest implements and without skill, enterprise or capital. The average yield of the ores, according to Ward, did not exceed 2½ ounces to the cwt. of ore. The miners drained their works by carrying water in rawhide sacks up ladders of notched logs. The ores were raised in the same tedious and laborious manner; and the crushing and smelting performed with the exercise of as little skill and enterprise. And yet these mines have yielded the most enormous fortunes that have ever been acquired in the history of the world.

The northern mines are conceded by Ward, Humboldt and others, to be richer in the quality of their ores, and to be nearer the surface. Indeed the veins now owned by this Company all outcrop on the surface, and can be distinctly traced along the soil.

The Heintzelman mine from its first opening yielded richer ores than the famous Real Del Monte at the depth of several hundred feet. These mines will therefore pay from the start. The officers of the company therefore believe that they make a low estimate when they assume that each mine will yield a net revenue of \$10,000 per annum. It is less than one tenth the yield of the poorest of the Mexican mines, and is therefore much less than what may reasonably be expected. The estimated annual produce may then be stated thus:

Santa Rita, 24 mines,.....	\$240,000
Arivaca, 25 mines,.....	250,000
Cerro Colorado, 29 mines,.....	290,000
San Coyetann, 2 mines,.....	20,000

Total estimated annual produce..... \$800,000

And this estimate is irrespective of any new veins that may be discovered and opened and of the agricultural value of the rancho, which, in that section, must be very great. That these views are borne out by the agent of the Company and the scientific gentlemen on the expedition, will be readily perceived from the following extracts from his letter of January 1, in which, after announcing the purchase of the Arivaca Rancho, he states, "This is a great acquisition, of value beyond computation or present imagination, because its resources are entirely undeveloped and unknown. The boundaries include four leagues, and inside of these boundaries are known to exist twenty-five or thirty silver mines which were worked by the Spaniards, and we may reasonably conclude many more different and distinct mines may be found on the same place unopened and undiscovered. This tract contains more mines than any other body of land in the territory, of the same size, and perhaps in the world; and is well known to Maj. Emory, Lt. Michler, Col. Gray and all the military and scientific men who have visited this country. I would not give it for a German dukedom, because it is intrinsically and really worth more, and will become more and more valuable as developments and discoveries are made, for years."

Such is the opinion of men on the spot, who have had the opportunity of visiting in person many of the rich mines, not only in Mexico but in California. The actual experience of the miners at work on the Heintzelman Mine shows that a force of twelve men can throw up three thousand dollars worth of silver ore per month from that one shaft. The engineers are engaged in erecting smelting works on the Arivaca Rancho, convenient to wood and water. The work is progressing vigorously and will be

continued till every one of the mines is put in a state of actual development.

For collateral evidence of the worth of these mines the reader is referred to *Ward's Mexico*, in 1827 and to *Wilson's Mexico, its Peasants and its Priests*.

The Company offer for sale a limited amount of their stock.

The office of the Company is the corner of Third and Walnut St. Cincinnati, O.

W. WRIGHTSON, Sec'y.

—CHICAGO IOWA & NEBRASKA R. R.—  
The iron for this road has begun to arrive at Chicago.

—MCGREGOR & ST. PETERS R. R.—The *McGregor Times* says of this road:

The engineers will turn over to the contractor inside of three weeks, nine miles of the track, for the commencement of operations. Mr. McDonald is employing hands for the campaign, and is supposed that the cars will be running 25 to 30 miles West by this time next year. The company had a most harmonious meeting on the 2nd—they will increase their Board on the ninth of July.

The means are at hand and in sight to push this road right through, and village owners, land proprietors and others concerned, should go to canvassing for stock in their respective localities with energy—the stock will be valuable, and Iowa operators and farmers may as well own a controlling portion as not. The Messrs McGregors have re-leased to the company the right of way through their land; the track will follow the bank of the river one mile north and then run westwardly. The light has at last shown on this enterprise, and increased nerve is visible in every branch of business at McGregor. North Iowa is now on the road to a destiny which few portions of the West can ever reach. Take of the breaks! "Toot! Toot!"

SANDUSKY, INDIANA & LOUISVILLE R. R.—  
The following is the corrected list of the Board of Directors: Hon. James Guthrie, of Louisville, Ky., C. S. Donaldson, J. J. Amos and Lewis Maddux, of Rushville; J. Mull, of Manilla; John M. Shawhan of Falmouth; T. Caldwell and James McCullom, of Fayette county; T. Tyner, Lafe Develin, Sol. Meredith, and N. Raymond, of Cambridge, and N. Garrett of Winchester. Lewis Maddux, Esq., was elected President of the Board, and James M. Cockfair was elected Secretary and Treasurer.

This road will take a direct course from Sandusky to Winchester in Indiana, and will make a connection there with the Pittsburg, Indianapolis & Bellefontaine road. It will connect with two important roads at Cambridge, viz: The Cincinnati & Chicago, and the Dayton and Indianapolis, or Central road.

MEMPHIS AND CHARLESTON RAILROAD.—We find the following gratifying statements of the business of this road in the *Memphis News*, which says that the steady increase in the profits is due to the very efficient officers who have the management of the road: Statement of Receipts and Expenditures for April and May, 1857, Memphis and Charleston Railroad.

RECEIPTS.	APRIL.	MAY.
From Passengers.....	\$44,168 77	\$45,715 74
" Freight,.....	24,631 52	21,819 23
" Mails,.....	2,318 75	2,318 75
Express,.....	432 23	435 17
	\$71,551 26	\$70,288 89
Total Expenditures.....	34,999 10	31,529 80
Net Earnings.....	\$36,552 16	\$38,761 09



## Railroads.

### NORTHWESTERN VIRGINIA R. R.

The Sixth Annual Report of this company is received, and, in view of the recent opening of the road, and its important character, we make full extracts. It is due to the officers of the road to say that it is an able document, and exhibits in a clear and candid manner the exact position of the affairs of the company. The financial statement of the company shows that the officers of the company have built a road costing in the aggregate over *six millions* of dollars, with a stock capital of less than *half a million*; and yet, such is the character and standing of the gentlemen engaged in the undertaking, that this herculean task has been performed without any apparent extraordinary exertion. We congratulate the stockholders and Directors upon the successful termination of the labor of construction. As to business, the position of the line being virtually an extension of the rich Ohio valley to the seaboard, and the fact that the line from Cincinnati to tide-water is 52 miles shorter by this than by any other route, will secure to this road, to say the least, a reasonable share of business.

The history of the company, as given in the report, is as follows:

#### HISTORY AND STATE OF THE WORK.

"A charter, authorising the construction of a railroad from the Ohio river at Parkersburg to the Baltimore & Ohio Railroad at the mouth of Three Fork creek, now Grafton, was granted by the Legislature of Virginia on the 14th of February, 1851; and on the 2d of August following, the necessary amount of stock having been subscribed, principally by residents of Parkersburg and its vicinity, the company was duly organized by the election of James Cook, President, and George Neale, Jr., Jefferson Gibbens, Jonathan M. Bennett, William Logan and Joseph Spencer, Directors. At the first meeting of the Board, Benjamin H. Latrobe was appointed Chief Engineer, and was directed to proceed immediately to survey a route for the proposed road, to defray the expenses of which ten per cent. of the stock subscribed was called in, and mostly paid before the close of that year. At the first annual meeting, additional stock having been subscribed at Baltimore, Thomas Swann was elected President, and George Brown, Johns Hopkins, Columbus O'Donnell, Wm. McKim, Charles M. Keyser, Thomas C. Jenkins and Benjamin DeFord, of Baltimore, and James Cook, John R. Murdoch and George Neale, of Parkersburg, Directors; all of whom, with a single exception noticed below, have continued to manage the affairs of the company till this time.

The road having been located, and contracts for its construction advertised for under the first Board, their successors immediately

proceeded to open the bids and assign the contracts. The construction was commenced late in December, 1852, and was prosecuted as vigorously as the finances of the company would permit; no suspension of the work having been permitted at any time, notwithstanding several severe depressions in money affairs, causing the stoppage of many similar enterprises.

The principal portion of the means used by the company has been derived from the guarantee of their bonds, to the amount of \$1,500,000 each, by the Mayor and City Council of Baltimore and the Baltimore & Ohio Railroad Company. Without their promised aid the enterprise would not have been undertaken. It had been confidently expected by those who had projected and prosecuted it up to the time the guarantees were authorized, that these corporations, so deeply interested in its speedy construction, would furnish the residue of the means required, by liberal subscriptions to its stock, or at least by an issue of their own bonds. Owing to the state of their finances at the time, they preferred to give the expected aid in the shape of a guarantee, thereby throwing on the stockholders the payment of a heavy semi-annual interest from the start, and greatly increasing the estimated cost of the work. In view of this saving of interest by these wealthy corporations, the Board felt justified, at a later period, in applying to both for additional assistance by way of loan, which was at length liberally responded to by the Baltimore & Ohio Railroad Company to the amount which appears in the appended financial statement.

By an economical management of these resources, and an additional issue of the company's bonds without guarantee, the Board have been able to meet a cash expenditure for construction, averaging during a great part of the time over one hundred thousand dollars per month, with entire promptness and without extraordinary sacrifices, and to lay the last rail at the expiration of four years from the commencement of the construction. They had also provided rolling stock suitable for the opening of the road, on such terms as they hoped would enable them to meet the payments from the earnings of the work; but, it being evident that additional equipment would soon be needed, and a considerable sum being still required to prepare the road for a heavy business, it became manifest that the net earnings could not, for some time, be expected to meet these new expenditures in addition to the regularly recurring semi-annual interest. These and other considerations, hereafter mentioned, led to the transfer of the working and management of the road to the Baltimore & Ohio Railroad Company, under an agreement which is farther noticed in another place.

Under the management of that company, the road was first opened for trade and travel

throughout its whole length on the first of last month (May, 1857). Sufficient time has not elapsed to confirm the assurances of the complete success of the work, based upon its peculiar advantages, which have been heretofore given, while nothing has yet occurred to contradict them.

As the result of a policy established at the beginning of the work and steadily adhered to, the road has been located through the spur of the Alleghenies covering Northwestern Virginia, on a line varying very little from its true direction, and yet with grades having a maximum of less than fifty-three feet to the mile, and with curves of never less than one thousand feet radius; thus presenting no material obstruction to the rapid passage of trains with ordinary loads, dispensing entirely with assistant power, and not requiring the same expenditure for repairs as roads of a different character. Two severe winters and the subsequent thaws have proved that the location is comparatively free from the danger of slides and slips, and that the drainage is sufficient to prevent any unusual settling of the road bed. The masonry and superstructures of the bridges are permanent and substantial, and the tunnels well secured. It is the first road uniting all these advantages that has been constructed through a country presenting similar features, and there are few anywhere which when first opened to the public were equally complete. The result is that it will require less than the ordinary repairs for many years, and that its working expenses will probably be less than those of any other road now in operation between the East and West. In short, as intended by its projectors, it is admirably adapted to facilitate the immense tonnage business which cannot fail to be thrown upon it in due season.

The Northwestern Virginia Railroad was undertaken and has been completed with a view to the accommodation of this description of business, and now offers to the bulky products of the West the most expeditious route to the seaboard, united with the shortest land transportation. It has been already demonstrated that these products, by keeping the river to Parkersburg, can be delivered at Baltimore in at least two days less time and at cheaper rates than at any other eastern port. This fact alone is sufficient to insure to the Northwestern Virginia and Baltimore & Ohio Railroads the command of any desirable amount of Western business, and, while giving to Parkersburg a commercial importance which could not otherwise be attained, to enhance that of Baltimore until it becomes the first shipping mart in the Union for Western productions. There can be no formidable rival of a route which combines both cheapness and expedition. Unusual facilities for loading and unloading, with the use of one of the best harbors on the Ohio river, are provi-



ded at Parkersburg for the accommodation of the river trade.

The simultaneous opening of the Marietta & Cincinnati and the Ohio & Mississippi Railroads, at the beginning of this month, affords the additional advantage of a railroad connection with Cincinnati and St. Louis. The former having, through local influence, been diverted from its original terminus at Belpre, opposite Parkersburg, without the construction of the branch to that point, promised when the diversion was effected, the effect is to unnecessarily lengthen the route some ten or eleven miles. The construction of the proposed Hocking Valley Railroad to a point on the former twenty-eight miles from Parkersburg and thirty-two from Marietta, over a superior route, will more than obviate this disadvantage, and, if continued to the Cincinnati, Wilmington & Zanesville Railroad at Lancaster, will furnish an entirely independent line, offering some peculiar advantages.

But even with the present connection, the railroad route of which the road of this company is part, is fifty-two miles shorter than any other between tide-water and Cincinnati. Two fast passenger and the requisite tonnage trains pass daily over it, and even in the present dullness of trade its through as well as its local business is increasing. A considerable augmentation may be confidently looked for at the opening of the fall trade, should the emptied granaries of the West be replenished by the approaching harvest.

By an agreement mutually entered into on the 27th of December last, the Baltimore & Ohio Railroad Company contracted to work the Northwestern Virginia Railroad with their own rolling stock, for the period of five years, reserving to themselves, in consequence of the disproportioned expenditure required of them at the beginning, the exclusive option to renew the contract for the like period on the same terms.

The contract, in fact, looks to the merger of this company in the Baltimore & Ohio Railroad Company, with the consent of the stockholders of each, on terms mutually advantageous, if the necessary legislation can be obtained. The provisions of that instrument should therefore be judged with reference to this expectation, as the object of both parties was to realize at once, as far as practicable, all the benefits anticipated from a consolidation. Should that consummation be effected, the surviving company will become the owners of all the property and franchises, and assume all the existing liabilities of the other, and will issue their stock in redemption of the stock of the latter, dollar for dollar.

#### CONCLUSION.

For the first time since the actual commencement of the work, there has, during the past year, been a change in the members of the Board. On the 11th November last,

Thomas C. Jenkins tendered his resignation as a Director, which was reluctantly accepted; and on the 9th February following, Thomas Swann resigned the Presidency after four years of active service in that capacity, and was immediately elected to fill the vacancy in the direction. P. G. Van Winkle, who had been Secretary from the organization of the company, was elected President until the annual meeting, and John L. Crawford was appointed Secretary.

The Board cheerfully embrace the opportunity afforded by the retirement of those who have been more immediately engaged in the construction of the work, to testify to their merits and efficiency. To the Chief Engineer, Benjamin H. Latrobe, and his principal assistants, George Hoffman, J. C. C. Hoskins and Albert Fink, too much praise cannot be awarded for the skill and energy they have displayed. Their industry and integrity are manifested by the fact that the large number of contractors and employees under their direction have been settled with without dispute, except in five cases only, of whom but three have resorted to the courts, where one judgment has already been given in favor of the company.

Of the Chief Engineer, whose reputation for professional skill and scientific acquirements is national, it is sufficient to add that he has added to his fame by the location and construction of the Northwestern Virginia Railroad. Less grand in its features than the Baltimore & Ohio Railroad, it pursues its direct and almost level way through a country nearly as difficult, costing relatively less than that splendid work, and presenting superior facilities for the rapid transmission of passengers and tonnage."

The details of construction, as given in the Report of the Engineer, are as follows:

#### THE PLAN OF THE WORK.

**THE LOCATION.**—In defining the line of the road, great care was taken to secure the best route. The country between Grafton and Parkersburg is of very irregular topography, and presented many practicable lines, all of which were examined and the present one adopted, after numerous and carefully compared surveys. The original idea as to the length of the line was that it would not fall short of 115 miles, the leading valleys being looked to as probably affording the only suitable route. The preliminary surveys, however, showed that a line of 110 miles could be had, and the estimates of cost were made upon that line. Subsequently, in locating the route for construction, it was reduced to 103½ miles, or some two miles shorter than the turnpike between the same points. This reduction was not accomplished without a considerable increase of cost, judiciously submitted to, however, for the sake of the resulting advantages.

The line has been located with maximum

grades of 1 foot in 100, or 52.8 per mile, and curves of radii not less than 1,000 feet. To obtain these moderate grades and easy curves upon such ground, heavy work has been necessary. The prominent feature of the location is the tunnels (of which there are 23—the longest 2,700 feet, the shortest 150 feet), made necessary by the height and steepness of most of the ridges at the summits, and the abrupt windings of the larger valleys. There are, however, but two high embankments and one long, deep cutting, and only three bridges of a span over 125 feet. There are one permanent and two temporary trestle works of limited height and length. The longest grade is less than four miles, and the ascents and descents alternate, so as to afford frequent relief to the locomotive engines in their draft. The general descent of the line is westward, the height of Grafton above tide being 1,008 feet, and Parkersburg 523. This will favor the coal trade towards the Ohio, which must be considerable. Upon the Baltimore & Ohio Railroad—between Grafton & Wheeling, 100 miles—the maximum grade is 79.2 and shortest radius of curvature 600 feet. The character of the two routes is different—the Baltimore & Ohio Railroad pursuing the main valleys except at two points, to which its high grades and heavy work are chiefly confined: the Northwestern Virginia Railroad occupying mostly the minor valleys, with more frequent undulations of grade, and a more general distribution of its bolder features. It will be the better line for quick passenger travel, and the more economical line for freight—and hence, although actually three or four miles the longer, will be virtually the shorter.

#### THE MODE OF CONSTRUCTION.

The *Bed of the Road* is 20 feet wide in excavation and 16 feet in embankment, designed for a single track except at sidings. Their widths are two feet more than is usual in single track roads, and hence the widening for a second track will be so much the more cheaply effected.

The *Tunnels* were excavated not less than 16 feet wide by 18 feet high, and are substantially timbered so as to make them perfectly safe until arched, the timbers being set so as to permit the walls of masonry to be built hereafter without disturbing them.

The *Masonry* is built of the best materials, in large blocks, regularly ranged and laid mostly without mortar.

The *Superstructures* of the bridges are upon the plan of Mr. A. Fink, so thoroughly tested upon the Baltimore & Ohio Railroad. The iron work and most of the wood work was executed at the Grafton work-shops, by the company's own mechanics, and is thoroughly well wrought out of the best material.

The *Water Stations* are capacious and substantial, although built economically, and without unnecessary embellishment.

The *Station Buildings*.—At the Grafton



Station the work-shops are extensive and permanently built of stone. An engine house and car house of brick, and several dwelling houses for mechanics and workmen, were erected by the Northwestern Virginia Railroad Company. That station having been purchased by the Baltimore & Ohio Railroad Company, under the recent contract between the two companies, will be improved by many other buildings, such as will be needed at this important point of junction between the two roads. At Parkersburg the freight and passenger station, on the Kanawha river, at its confluence with the Ohio, is believed to be one of the most commodious structures of its kind and extent. It combines great facilities for the arrival and departure of passengers and the transshipment of freight by drays on the land side, and hoisting machinery on the water side. The outer station consists of an extensive and beautifully situated area of 15 acres upon the upper plateau of the town, out of reach of high water, and with sufficient front upon the Kanawha and the turnpike to give ready access to them both. On this ground is a brick engine house and work-shop, with a water house under the same roof.

At most of the points along the line selected for stations neat and convenient houses have been erected for the local business of the road—the ground being generally owned by the company, and leased of it by the agent erecting the improvement.

The *Railway Track* is composed of a rail of the T pattern of 52 lbs. per yard, 3½ inches high, 3½ inches wide at the base, and 2¼ wide at top. The length of the rails is from 20 to 24 feet, with few exceptions. There are 2,900 cross-ties to the mile. The joints are confined by a simple wrought-iron-lipped chair of the common form—provision has been made, however, for the future application of a wooden block splice of the Trimble pattern, such as is used upon the Baltimore & Ohio Railroad. The track is well ballasted throughout, chiefly with broken stone. Two-thirds of the rails are of English manufacture, and deemed to be of very superior quality. The remainder of the iron was rolled at Mount Savage and Wheeling, and it is hoped will not come short of the standard of the imported rail."

The financial affairs of the company are thus summed up:

*Statement of the condition of the Northwestern Virginia Railroad Company, as shown by the books on 30th April, 1857:*

Capital Stock—Whole amount subscribed.	\$ 520,550 00
Amount uncollected.	52,244 16
	\$ 468,305 84
Loans Nos. 1 and 2—Bonds guaranteed by City and Baltimore & Ohio R. R. Co.	2,500,000 00
Loan No. 3—Third Mortgage Bonds issued and hypothecated.	1,980,700 00
Loan No. 6—Advanced by B. & O. R. R. Co.	300,542 88
Notes of company held by same.	476,982 42
Contractors' Advance Bonds—Am't issued.	42,000 00
Final Estimate Bonds—Am't issued.	92,905 57
Bills Payable—Notes for iron rails maturing	159,067 92
Advance to pay iron notes.	18,746 06
Advances by citizens of Parkersburg.	20,000 00
Issued to contractors and others.	39,200 71
Burton Despard, Trustee for Johnson Mills.	3,000 00
Outstanding Coupons—Amount due and not presented.	3,375 10
Mayor and City Council of Baltimore—Advanced by them.	45,000 00
Disbursing Agents—Balance due them.	1,984 23
Country Banks—Balance due them.	1,208 76

Personal Accounts—Due contractors and others.	29,515 15
	\$6,187,834 54
Cost of Road—Expended to close of last fiscal year.	\$3,995,359 91
Expended this year under the following heads, viz:	
Cost of road.	279,063 74
Engineer department.	17,184 78
Right of way.	4,133 15
Construction by company.	975 14
Graduation.	189,861 07
Bridge masonry.	10,293 21
Railway tracks.	579,737 36
Bridge superstructures.	11,364 83
Water stations.	8,195 20
Parkersburg river station.	21,089 68
do central do.	93 90
do outer do.	8,062 23
Grafton station.	31,146 03
Way stations.	39 03
Supervisors' houses.	570 24
Interest.	242,358 05
Contingent expenses.	1,866 65
Current do.	5,675 86
	\$5,406,490 06
Deduct sale of Grafton station, &c.	84,339 84
	\$5,322,150 22
Bills Receivable—Notes maturing.	37,302 50
Hypothecated Bonds—Deposited with iron notes and Baltimore & Ohio Railroad Company.	118,000 00
Balt. & Ohio R. R. Co.—Coupons to be returned.	540 00
Johnson Mills Property—Cost of same.	6,066 67
Cash—Balance in hand.	3,175 16
	\$6,187,834 54

*Statement of Cash Receipts and Disbursements of the Northwestern Virginia Railroad Company, during their sixth fiscal year, ending April 30th, 1857, made out to accompany the Sixth Annual Report of the President and Directors to the Stockholders, as required by Chapter LVII, Sec. 17, of the Code of Virginia:*

RECEIPTS.	
Balance of cash from last year.	\$ 2,712 90
Capital Stock—On account of subscriptions.	19,090 34
Loan No. 3—Proceeds of bonds sold.	352,522 54
Loan No. 4 " " " " " " " " " " " "	46,809 21
Loan No. 6—Amount from the Baltimore & Ohio R. R. Co.	260,235 25
Interest—Amount received.	6,680 14
Bills Receivable—Notes discounted and paid in.	397,251 94
Bills Payable—Company's notes discounted.	110,036 48
Cost of Road—Amount received in an anonymous letter.	5 00
Right of Way—Amount received for rent.	95 00
Graduation—Am't rec'd from sale of stocks.	116 00
Railway Track—Am't received from freight, passengers, &c.	6,251 87
Parkersburg Central Station—Am't received for rent of buildings.	440 00
Grafton Station—Amount received for rent of buildings, &c.	2,004 42
Current Expenses—Am't received for office furniture sold.	97 64
Country Banks—Balance due for advances.	1,208 76
	\$1,206,157 49

DISBURSEMENTS.	
Country Banks—Paid Balance due them at close of last year.	\$ 6,391 05
Cost of Construction—Paid under the following heads:	
Graduation, for gunpowder, &c.	237 15
Bridge masonry, for freight.	7 09
Railway tracks, for freight, duties, &c. on iron rails.	371,137 86
Engineer department, for stationery, &c.	39 84
Parkersburg river station, for scales, &c.	2,800 00
Parkersburg outer station, for land for water pipes.	925 00
Grafton station, for pig iron, &c.	1,029 00
Contractors, for monthly and final advances	42,814 97
Disbursing Agents—Paid the following:	
Benjamin H. Latrobe, Chief Engineer.	13,618 17
George Hoffman, Engineer 1st Division.	2,538 99
J. C. C. Hoskins, " 2d "	15,481 59
Albert Fink, " 3d "	16,676 79
Wm. D. Burton, Sup't bridges, track-laying, &c.	138,780 24
Burton Despard, right of way Agent.	1,323 88
James Cook, do do	1,793 97
Bills Payable—Paid company's notes.	420,581 23
Interest—Paid coupons, discounts, &c.	159,181 16
Contingent Expenses—Paid for counsel fees, &c.	1,866 65
Current Expenses—Paid salaries, counsel, rent, stationery, &c.	6,457 71
Balance to next year—Cash in hand, as per Statement A.	3,175 15
	\$1,206,157 49

## CLEVELAND &amp; TOLEDO R. R. CO.

We find in the *Sandusky Register* some extracts, and, as we have not received a copy of the Report, we copy such extracts as we find. The Report says:

"The steam ferry boat *Ottawa*, belonging to this company, was transferred to Cleveland, and on the 19th of November, 1855, put to use in transporting freight and passengers across the Cuyahoga river, in order to operate a portion of the *through* business over the Northern Division, which is the main and longest line of the company; as the *through* business had been previously done almost entirely over the Southern Division, between Toledo and Grafton, and the C., C. & C. R. R. between Grafton and Cleveland, under a contract made between that company and the T., N. & C. R. R. Co., prior to the consolidation forming this company, complaint was made by the C., C. & C. R. R. Co. against any diversion of the *through* business over the Northern Division of this company's road. A temporary misunderstanding arose between the two companies on this point, which, however, was satisfactorily settled by the conclusion of an agreement and lease entered into July 30, 1856, whereby that company leased to the C. & T. R. R. Co. an undivided half interest in its tracks, depots and property at and between Cleveland and Grafton for the term of 20 years, renewable for a like term at the discretion of this company, for the sum of \$66,000 per annum. By this lease the company acquires the joint use and benefit of the double tracks between Cleveland and Grafton and the depots, side tracks and real estate of the C., C. & C. R. R. Co. at Cleveland, and the important facilities afforded by a close connection with the Cleveland & Erie R. R., which was deemed very essential to the interests of the company, as well as important to the success of the *Great American Lake Shore Railroad Line* between Buffalo and Chicago; there now existing no necessity for any transfer of passengers, either by ferry or omnibus, at any point on the whole line. This joint arrangement afforded the opportunity of connecting the Northern Division, at Berea, with the C., C. & C. R. R. track, thus enabling the trains on each division to run into the general depot at Cleveland. It also enabled this company to accomplish much towards the future economical management of the entire road. In the lease referred to the C., C. & C. R. R. Co. agreed that whenever it was desired by this company that the gauge of the tracks between Cleveland and Grafton should be changed from 4 ft. 10 in. to 4 ft. 9½ in., it being found that locomotives and cars of either gauge, of 4 ft. 10 in. or 4 feet 8½ in., could run with safety and facility on a track or gauge of 4 ft. 9½ in. At the suggestion of our Superintendent, E. B. Phillips, Esq., it was decided to change the gauge of both divisions of the road to one and the same gauge



of 4 ft. 9½ in.; and the double track of the C., C. & C. R. R., between Cleveland and Grafton, was also changed to the same gauge.

Our locomotives and cars, with the exception of the 4 ft. 8½ in. freight cars, have been adapted to it, so that the gauge is now uniform on both lines, and the equipment appropriate for use on either. The necessity of maintaining two separate departments in the superintendence of the road, at extra expense, no longer exists. The shops of the company located at Norwalk will, with a few additions, answer for the entire road. To accomplish this desirable end has required considerable temporary outlay, but the benefits have been immediately felt in the vastly improved economy of the general management of the road.

Since the agreement was entered into with the C., C. & C. R. R. Co., considerable expenditure has been incurred jointly, under the contract with that company, in replacing the compound rail that has been laid between Cleveland and Grafton with a substantial T rail.

Necessary expenditures have been made in replacing the trestle bridges on the Northern Division with substantial structures; in continuing the ballasting of the two divisions, which is nearly completed; in making the track and depot connections on the middle grounds at Toledo; in fencing the track of the Northern Division, and for various other things pertaining to a new and incomplete line of road.

These expenditures have been unavoidable, as the policy of the company, both as regards safety of management and permanence of establishment, has required them.

There is but little unfinished work to be done applicable to the construction account.

The tracks on the middle grounds, at Toledo, in the course of one or two years will require an embankment of earth in place of the present piling. A few trestle bridges of small size on the Northern Division will need to be replaced by stone culverts. Some additions will be necessary to the shop facilities at Norwalk, caused by concentrating the work of repairs for the entire line at that point; and there is still a small amount of ballasting and fencing to be done. None of these items will demand any large expenditures, and the work may be done as circumstances shall require.

The business operations of the road, as set forth in the report of the General Superintendent and the detailed statements connected therewith, must be highly satisfactory and gratifying to the stockholders of the company. The gross receipts from earnings show a large and steady increase:

Earnings for year ending June 1, 1855.....	\$ 780,820 42
" " " " 1, 1856.....	961,471 15
" " " " 1, 1857.....	1,144,800 79

The net earnings for the past year may be computed as follows:

Gross receipts for year ending June 1, 1857.....	\$1,144,800 79
Deduct running expenses.....	563,758 45

Net earnings for the year ending June 1, '57..\$581,041 94

The outstanding stock of the company is.....	\$3,313,712 50
The outstanding bonded debt is.....	3,354,207 50

The balance of the bills receivable and bills payable accounts, which may be considered the floating debt of the company, is \$365,887 75, and the company holds various assets to the nominal amount of \$432,903 51, about one-half of which may be made applicable to the reduction of the floating debt.

The necessity of completing the unfinished work on the Northern Division, and of making the expenditures on construction account, hereinafter alluded to, has been the occasion of some embarrassment in the financial operations of the company, particularly as the encouraging business of the road has led stockholders to look for their regular dividends.

There has been paid to the stockholders, since the report made in July, 1854, and during the aforesaid large expenditures, twenty-six per cent. in dividends, of which sixteen per cent. has been paid in cash and ten per cent. in bonds.

To provide the means for finishing the above-mentioned work, and for aiding the company in its monetary affairs, it has been deemed important that a financial agent should be maintained in the city of New York. The Treasurer of the company, E. B. Litchfield, Esq., has acted as such agent, and the company is much indebted to him for the satisfactory discharge of the onerous and responsible duties that have been thrown upon him. It is hoped that the condition of the finances of the company will soon, if not immediately, warrant the discontinuance of such agency, and of much of the expense attending it.

When we consider that for the past two or three years the crops of the country have been light and meagre—that the Toledo, Wabash and Western Railroads, running through a most fertile region over 400 miles in length, have not yet had the opportunity to develop the large business that locally belongs to them—that the Toledo & Detroit Railroad, which will bring a new and important addition of business to our line, is soon to be in operation—that the reciprocating business of the East and West is every year enlarging to a surprising extent, it is reasonable to expect that this company's road, forming, as it does, a central link in the Great American Lake Shore Route, between the East and the West, will still continue steadily to increase in its business and importance. The special location of its line, guarded as it is from the interference of competing roads, must always secure to it a healthy and reliable business. The Toledo, Wabash & Western, the Southern Michigan & Northern Indiana and the Toledo & Detroit Railroad lines converge into its western terminus at Toledo, and the

Cleveland & Buffalo, the Cleveland & Pittsburgh and the Cleveland & Mahoning Railroad lines converge into its eastern terminus at Cleveland. As the vast country tributary to these various lines increases in population and productiveness, so must the business of transportation steadily and surely increase over this line of road.

In July, 1855, the company authorized the issue of Sinking Fund Bonds, secured by a mortgage on the road and its equipment, payable July, 1855, bearing interest at seven per cent. per annum, paying semi-annually, for the purpose of substituting or exchanging them for the present outstanding bonds of the company. At the same time a Sinking Fund at one cent per annum, on the funded debt, commencing July 1, 1857, and payable semi-annually, was established to relieve the bonds at maturity. The first contribution to this fund of Jan. 1, 1857, has been made and will be followed successively every six months by a similar appropriation. The establishment of this fund in connection with the mortgage security attached to these bonds, will place them before the public among the most desirable securities for investment. A small portion of these bonds have already been exchanged for other bonds of the company.

In conclusion, I have great satisfaction in being able to report that the entire line is in good working condition; that the rolling stock, under the supervision of J. M. Jackman, Esq., our Master Machinist at Norwalk, is in excellent order and repair; that the various operative departments are well systematized, and, it is believed, economically managed; that the officers and employees of the company have been zealous and faithful in the discharge of their various duties; and that our relations with other railroad companies are amicable and satisfactory.

By order of the Board,

J. B. WARING, *Pres't.*

CLEVELAND, O., June 17, 1857.

The Report of the Superintendent, E. B. Phillips, Esq., is a compact, business-like document, in which is condensed much interesting information concerning the actual running operations of the road. From it we learn that the earnings of the eleven months ending April 30, 1857, have been:

From Passengers.....	\$677,417 66
From Freight and Mails.....	378,488 93

For corresponding months of last year....	\$1,055,906 79
	874,569 90

Gain.....	\$181,336 89
-----------	--------------

The total mileage of trains has been 483,314 miles, carrying 399,059½ passengers and 145,666 tons of freight.

We are informed that the track upon the "C. & T. R. R. proper" (as the Southern Division is called) was never before in as good condition as at the present time; and that the iron upon the Northern Division is in excellent order, and can be kept good for



the present at comparatively small expense. The change of tracks to the uniform gauge of 4 ft. 9½ inches works satisfactorily, and Mr. Phillips says that he sees no reason to qualify the statement made some months since, that the change would be better for the road than an addition of 15 per cent. to the rolling stock with the gauge remaining as at that time.

The road has been remarkably free from accidents, which is the best possible commentary upon the perfection of the running arrangements and the care and vigilance of the officers of trains. We quote from the Superintendent's Report:

"Since the opening of the road in Dec., 1852, 1,731,024 passengers have been carried in the cars of the company, equivalent to 99,372,267 one mile.

"The following are the only cases where passengers have received personal injuries:

"JAN. 13, 1853.—Mail train was thrown from the track a few miles east of Elmore. Irving Stewart had his collar-bone broken.

"JAN., 1854.—A passenger who had incautiously projected it too far from the cars, had an arm broken by its coming in contact with a bridge.

"AUG. 27, 1854.—Night express from Toledo was thrown from the track by an ox lying between the rails. Adam Sypley had a leg broken; two others were somewhat bruised, but not seriously.

"APRIL 10, 1856.—Dan. Sullivan, an emigrant, stepped from the cars at Grafton, on opposite side from station, crawled under the car to fill his dish with water from the tank; while lying upon the rail, not being seen, the train was started, running over and cutting off one of his legs.

"DEC. 22, 1856.—By breaking of wheel and axle, a coach was thrown from the track at Amherst, and Mrs. Senter and Mrs. Lee were badly bruised, but had no bones broken."

So far, therefore, as the condition of the road is concerned, its business, and the manner of conducting it, the state of the track, the excellent repair of machinery and rolling stock, are subjects of congratulation among the friends of the road. These results show competency and prudence in management, as well as great industry and energy.

#### ALABAMA & FLORIDA RAILROAD.

OFFICE OF THE ALA. & FLA. R. R.  
Pensacola June 15th 1857.

At a meeting of the board of Directors held this day, the Report of the Engineer of the Road was presented, and on motion it was ordered that the City papers be requested to publish the same.

#### GENTLEMEN:

Being prevented by absence from making my report previous to the meeting of the Stockholders, allow me to do so at the present time.

When I became connected with your road in February last I found the work progressing favorably, and since that time the Contractors have continued to push forward with con-

siderable energy. They are both able and willing to increase their force if the Company see fit to furnish the means to push forward the work more rapidly.

The grading has been completed or nearly so for a distance of 20 miles turnouts included.—Since the first of January the Contractors have been engaged on the part between the 20th and 30th miles, two thirds of which has been done.

The recent rains have done some damage, which however falls on the Contractors, but even if the Company had to bear the loss, the information would be worth much more than the loss, for we now see what will be needed to make the road-bed permanent. In several places where, from the appearance of the country, culverts were thought unnecessary, the recent high waters have proved the contrary, and in two or three instances the culverts that have been made proved insufficient, and larger ones will be built.

The majority however have stood the test, and I think all that have stood the late rains will not fail hereafter, as they were as heavy as any that have ever fallen in this section.

We have been quite fortunate so far in finding stone of a very good quality to build our culverts of, and I think there are but few points at which we will fail finding stone within a reasonable distance of where they are needed.

Two of the quarries are near the line of road, and furnish stone suitable for building purposes, and I think it advisable to get stone from them to build our wharves with.

It will be necessary to put open work at several places owing to the amount of water. At Pine Barren, it will be necessary to put a Trestle 800 feet in length. At Mitchell's Creek 250 feet. At Canoe Creek 300 feet. Escambia Creek (the largest stream crossed) it has been decided to put 800 feet. Cottons Creek 250 feet. Total length of trestle twenty-four hundred feet.

I anticipate no trouble in making foundations for the several trestles, as the bed of the streams are generally of sand, and at Escambia Creek there are piles now standing that were put there by hand, years ago.

From the manner in which the work has progressed I see nothing to prevent the road being put in running order by this time next year to the State line if the iron is furnished in time to allow 9 months to lay it down.

I think it advisable to push the work through as fast as possible so as to get the trade of Conecuh next Fall, also to give the people confidence in the enterprise. It is thought that the people of Conecuh are only waiting to see you commence laying track to take hold, and if they commence immediately the road may be in running order from this place to Montgomery in 2½ years from this date.

Some of the ties have been gotten out, and delivered along the line. There is a company of hands now engaged getting more. There is no difficulty getting ties after we get a few miles in the country, but the ties for the first two miles will have to be brought down the bay, and hauled up the line.

The right of way has been obtained along most of the line, but there are some who are willing to sit idle, and reap the reward of other men's labor, and they are the men who think they are entitled to pay for the little land necessary for the construction of the road.

Ground for a depot has been given at the

fourteen mile turnout, but at the next the owner has refused to give ground, and it will be necessary to summon a jury to assess the damage here as well as at these places where the right of way has been refused, also through those tracts for which we can find no owner.

It will be necessary to build a wharf at the point where the road strikes the bay to land our iron, engines and cars on, and if you determine to purchase the iron immediately there is no time to be lost, but the contract for furnishing the timber necessary for its construction should be let at once. Below you will find a table showing the amount of work to be done on the first 30 miles, also the work done.

Estimated cost of the first thirty miles of the Alabama and Florida Railroad:

Graduation masonry & budging.....	183,707 00
Grubbing & clearing.....	23,246 00
Cross-ties & track-laying.....	94,047 00
Total.....	300,000 00

#### AMOUNT DONE.

Graduation masonry & budging.....	136,722 00
Grubbing & clearing.....	19,774 00
Cross-ties.....	8,066 00
Total.....	164,562 00

Showing a balance to be done of..... 135,438 00

It will be seen that the balance to be done is principally for cross ties and track-laying leaving only \$49,457 of the account to the other items.

I understand that it is the object of several persons to erect saw-mills along the line of road as soon as track-laying is commenced so as to have business for the road as soon as the track arrives at those points. Briek-yards are also spoken of which will depend on the road for transportation to market. By the above it will be seen that there is a prospect of business for the road as soon as it reaches the first depot.

All of which is respectfully submitted,  
WM. F. LEE, C. Engineer.

—LEXINGTON AND & BIG SANDY R.R.—At the annual meeting of the stockholders of the Lexington and Big Sandy Railroad Company, held in Mount Sterling on Wednesday, the 17th ult., the following gentlemen were elected Directors for the ensuing year, viz:—Joseph Bondurant, of Montgomery; G. W. Crawford, of Carter; D. B. Groom, of Clarke; John B. Payne, Jr., of Fayette; J. M. Nesbitt, of Bath; and D. K. Weis, of Greenup. At a subsequent meeting of the Board Richard Apperson, Esq., was elected President.

—PITTSBURG COLUMBUS & CINCINNATI R.R.—This line of travel is formed by a combination of the Pittsburg, Fort Wayne and Chicago, from Allegheny to Rochester, twenty-five miles west of Pittsburg; thence by the river extension of the Cleveland and Pittsburg Road for forty-six miles, to a point three miles West of Stubenville, where it joins the Stubenville and Indiana Road, for a distance of one hundred and fourteen miles, to Newark, Ohio, at which point it intersects the Central Ohio Road, which is used for thirty-three miles, to Columbus, the eastern terminus of the Little Miami Railroad, which being one hundred and twenty miles in length, connects it with our city—making the entire distance from Pittsburg to Columbus two hundred and eighteen miles, and from Pittsburg to Cincinnati three hundred thirty-eight miles, being twenty-nine miles shorter than the route *via* Crestline.



## RAILROAD RECORD.

TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &c.

Amount of Loan.	Rate of Int'r'st.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds	Name of Company.	Quot' of Stock	Lin' of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hmp'r	.....	173	5,000,000.00	.....	.....	.....	none.
498,800	6			1802-3	2d "	.....	Androsco'g'n & Kennebec	.....	54.55	1,400,000.00	.....	209,475.46	110,246.98	4 pr. ct. 6m
199,060	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	199,000.00	276,123.74	173,780.74	8 pr. ct.
52,646	0			now	"	.....	B'n'g'r, Old T. & Milford.	.....	12.5	135,000.00	52,646.26	39,104.40	2,671.61	15,000 in '53
500,000	7		N. Y.	1866	1st mortgage.	.....	Boston & Worcester...	.....	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	16,000 4.6m
500,000	7			1857-9-62	Income.	.....	Buffalo & State Line...	.....		1,300,000.00	.....	.....	.....	5 pr. ct. 6m.
300,000	7			1864	Domestic.	.....	" " "	.....		.....	.....	.....	.....	
200,000	7				4th mortgage.	30.	Central Ohio.	.....		.....	.....	.....	.....	
577,187	6			1872	1st mortgage.	.....	Champl'n & St. Law'rence	.....	43	1,872,800.00	1,001,087.00	168,200.00	77,760.00	10 per ct.
192,200	7			1874	2d "	.....	Ch'r'l'te & South Carolina.	.....	119	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
380,000	7				Domestic.	.....	Ch'go, Burl'ng'n & Quincy.	.....	138	3,746,900.00	3,114,000.00	1,095,165.00	571,725.23	15 pr. ct. 6
1,440,000	7			1864-7	1st mortgage.	.....	" " "	.....		.....	.....	.....	.....	
1,300,000	6-7-8		N. Y.	1865-9	2d "	.....	Chicago, Fulton & Iowa.	.....	5	.....	.....	.....	.....	
374,000	8			1868-76	Convertible.	.....	Cin. W'p'ng'n & Zanes'ville	.....	13 1/2	1,761,149.16	2,241,500.00	221,491.96	.....	
1,500,000					1st mortgage.	.....	" " "	.....	25	.....	.....	.....	.....	
532,000					2d "	.....	" " "	.....	25	.....	.....	.....	.....	
104,000					3d "	.....	" " "	.....	25	.....	.....	.....	.....	
305,500					Income.	.....	Cleveland Col. & Cin.	103 1/2	139	4,741,220	.....	1 3,754	700,804	6 per cent.
540,000	6			1873	1st mortgage.	.....	Cleveland & Mahoning...	.....	85	1,500,000.00	.....	.....	.....	
43,000	7			1864	2d "	.....	Cumberland Valley.....	.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24
400,000	7				1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00	665,578.79	288,077.84	\$234,133
000,000	7			1857-8-9	1st mortgage.	.....	Eastern Railroad.	93 1/2-10	.....	3,345,000.00	.....	30,597.30	19,692.30	
500,000	0				1st mortgage.	.....	East Ten. & Virginia...	.....	130	625,450.00	.....	.....	.....	
350,000	7			1859	1st "	.....	Essex Railroad.	.....	20	700,000.00	.....	248,070.42	136,061.90	\$133,251.45
740,000	7			1861	2d "	.....	Evansville & Crawf'd'vle	.....	109	2,228,657.0	.....	681,162.52	213,837.61	3 per cent.
88,000	10			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,540,000.00	.....	.....	.....	
400,000	7				1st mortgage.	.....	Fox River Valley.	.....	33	800,000.00	.....	50,381.33	14,822.45	\$166,240.00
200,000	10				1st mortgage.	.....	Fair Haven Branch.	.....	15	300,000.00	.....	1,065,202.54	337,689.42	\$166,240.00
100,000	6				1st mortgage.	.....	Georgia RR & Banking Co	.....	233	4,156,000.00	.....	27,576.69	14,207.07	
100,000	6				1st "	.....	G't Falls & Conway R.R.	.....	20	.....	.....	2,068,236.00	.....	8 pr. ct.
300,000	6			1858	1st "	97 1/2	Houston & Railroad.	.....	74	2,000,000.00	.....	1,924,382.44	176,329.95	
4,000,000	6 1-9			1869-70	2d "	81	Hudson River.....	21	144	4,000,000.00	.....	.....	718,037.40	
2,000,000	7			1860	3d mortgage.	58	" " "	.....	144	4,000,000.00	.....	.....	.....	
1,812,000	7			1875	1st "	97	" " "	.....	144	4,000,000.00	.....	.....	.....	
12,885,000	7 1/8			1875	1st "	64 1/2	Illinois Central R. R.	124	704	18,453,370.00	.....	1,476,035.27	1031489.05	7 pr. ct.
4,115,000	7			1860	Freeland.	94	Indiana Central.....	48	72 1/2	3,558,370.00	.....	354,871.00	.....	3 pr. ct.
3,000,000	7			1862	1st "	80	Iron R. R. ....	.....	13	123,700.00	.....	.....	.....	
600,000	7	Nov. 1,			1st mortgage.	.....	Kentucky Cen. 2d Div.	.....	.....	719,500.00	.....	.....	.....	
700,000	7	Jan. & July 1			1st mortgage.	.....	Knoxville & Kentucky.	.....	32	166,000.00	.....	23,233.59	14,233.59	
50,000	7				1st "	.....	Laurens (S. C.) R. R.	.....	184	.....	.....	50,234.71	14,149.13	\$8,000
700,000	7				1st "	.....	Louisville & Nashville...	.....	12 3/5	300,000.00	.....	587,236.57	162,277.50	10 pr. ct.
218,000	7				1st "	.....	Mad River & Lake Erie...	.....	.....	2,697,090.00	.....	.....	.....	
1,000,000	7			1866	2d "	.....	" " "	.....	.....	2,697,090.00	.....	.....	.....	
1,000,000	7			1875	3d "	.....	" " "	.....	.....	2,697,090.00	.....	.....	.....	
2,000,000	6				1st "	.....	Manchester & Lawrence.	.....	26	1,000,000.00	.....	.....	.....	\$24,000
2,500,000	7			1868	1st "	50	Marietta & Cincinnati...	19 1/2	.....	.....	.....	.....	.....	
2,000,000	7 and 8			1874	2d "	.....	Mexican Gulf R. R.	.....	27	.....	.....	.....	.....	
60,000	8			1867	1st "	.....	Milwaukee & Horicon...	.....	30	.....	.....	.....	.....	
420,000	8				1st mortgage.	.....	Mineral Point R. R.	.....	32	.....	.....	.....	.....	
320,000	8			1881	1st "	.....	" " "	.....	32	.....	.....	.....	.....	
320,000	8			1-68	2d "	.....	Mobile & Ohio.	.....	497	10,000,000.00	.....	253,498.96	162,802.24	
6,000,000	6			1884	1st "	.....	Nashua & Lowell R. R.	.....	15	600,000.00	.....	194,732.42	55,501.74	7 pr. ct.
500,000	7			1869	1st mortgage.	.....	New Haven & North'm'tn	.....	53	922,500.00	.....	7,707,348	3,609,481	2 pr. ct. 6m
2,366,000	7	May & Nov.	N. York		1st mortgage.	99	New York Central....	80 1/2	555	23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
8,892,600	6	June & Dec.	N. York	1864	Con. till 1850.	84 1/2	N. Y. & Harlem R. R.	10 1/2	133	5,717,100.00	.....	1,040,593.26	64,678.71	\$37,692.30
3,000,000	7			1873	1st mortgage.	79	" " " Pref.	25	.....	.....	.....	.....	31,544.40	
936,000	7			1864	2d "	.....	N. Y., Prov. & Boston...	.....	50	1,58,000.00	.....	245,713.00	.....	
411,700	6			1863	1st "	.....	N. Lon., William'tu & Pal.	.....	66	1,700,000.00	.....	120,571.50	.....	\$25,000
500,000	7				2d "	.....	" " "	.....	.....	.....	.....	.....	.....	
300,000	6				1st "	.....	Pontchartrain R. R.	.....	5	500,000.00	.....	116,705.00	366,118.80	7 pr. ct.
1,500,000	6			1873	1st mortgage.	.....	N. O., Opel'o's & Gr't West.	.....	62 1/2	6,00,000.00	.....	1,007,666.48	.....	
1,000,000	6			1873	2d "	.....	N. Y. & New Haven.	.....	103 1/2	3,000,000.00	.....	.....	.....	
2,000,000	6			1885	3d "	.....	" " "	.....	.....	.....	.....	.....	.....	
1,500,000	7			1859	1st mortgage.	.....	North Western Va. R. R.	.....	.....	.....	.....	.....	.....	7 pr. ct.
3,000,000	7				1st mortgage.	.....	Northern (N. Y.) R. R.	.....	118	2,000,000.00	.....	600,000.00	.....	
419,300	5				1st "	.....	North Missouri R. R.	.....	19 1/2	.....	.....	29,176.74	88,458.56	2 1/2 pr. ct.
221,800	6			1877	1st mog.	.....	Norwich & Worcester R.R.	.....	60	2,111,500.00	.....	304,236.33	.....	
				1860	1st "	.....	Ogd'nsh'g, Clay'tn & Rome	.....	.....	.....	.....	.....	.....	
400,000	6				1st mortgage.	.....	Ontario, Simcoe & Huron	.....	94	.....	.....	289,690.10	137,875.93	5 pr. ct.
1,200,000	6			1866	2d mortgage.	.....	Orange & Alexandria R.R.	88 3/4	.....	2,957,500.00	.....	276,539.02	.....	
300,000	7			1876	1st "	.....	" " "	.....	.....	.....	.....	.....	.....	
300,000	8			1868	1st mortgage.	.....	Peoria & Bureau Val. R. R.	.....	47	1,500,000.00	.....	.....	.....	6 pr. ct.
				1873	1st "	.....	" " "	.....	.....	.....	.....	.....	.....	
350,000	6			1861	1st mortgage.	.....	Philadelphia & Trenton.	.....	28 1/5	1,000,000.00	.....	.....	.....	
800,000	7			1864 to 1874	1st "	.....	Portsmouth & Concord.	.....	47	.....	.....	.....	.....	
1,260,000	6			20 years.	1st mortgage.	.....	Potsdam & Watertown...	.....	76	2,000,000.00	.....	68,525.42	.....	
					1st mortgage.	.....	Rutland & Washington...	.....	62 1/2	950,000.00	.....	.....	.....	
					1st mortgage.	.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00	.....	.....	.....	
					1st mortgage.	.....	Salem & St. Louis R. R.	.....	168 1/2	400,000.00	.....	.....	.....	
					1st "	.....	Sud'sky, Mansf'de & New'h	.....	116	.....	.....	19,050.64	.....	
					1st "	.....	Sullivan Railroad.	.....	26	500,000.00	.....	75,246.06	.....	
					2d "	.....	Tennessee & Alabama...	.....	145	.....	.....	39,586.44	17,378.08	11m. 12 pr. ct.
					1st mortgage.	.....	Terre Haute & Richmond	.....	73	1,294,450.00	.....	.....	.....	
				1861	2d "	.....	Toledo, Wabash & Western	.....	242	1,000,000.00	.....	.....	.....	
				1840	3d "	.....	Troy & Boston.....	.....	.....	.....	.....	.....	.....	
				1875	1st "	.....	" " "	.....	.....	.....	.....	.....	.....	
					1st, 2d, 3d "	.....	Vicksburg & Jackson...	.....	46	.....	.....	.....	165,076.04	2 pr. ct.
2,500,000					1st, 2d, 3d "	.....	Virginia & Tennessee.	.....	215	3,000,000.00	.....	382,048.60	.....	
596,000	7				1st mortgage.	.....	Westchester (Pa.) R. R.	.....	31	165,000.00	.....	.....	.....	
200,000	7				2d "	.....	Wilmington & Manchester	.....	171	.....	.....	.....	.....	
					1st "	.....	" " "	.....	.....	.....	.....	.....	.....	
					1st "	.....	Winchester & Potomac...	.....	32	.....	.....	.....	.....	
					2d "	.....	Worcester & Nashua...	.....	45 6/9	.....	.....	.....	.....	



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

June 20th, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858.	—	—
Cin. Ham & Dayton, 2d mort., .....	—	80
Detroit & Milwaukee, 1st mort., conv. till 1865, .....	63	65
Erie, 3d Mortgage, 1883, .....	78	80
" Sinking Fund, .....	78	80
" conv. 1862, .....	68	70
Grand Trunk (Canada) Debenture, .....	87½	89½
Great Western " conv., .....	106	112
" " non-conv., .....	106	108
Illinois Central, 1st Mort., 7s, .....	89	91
" " with option 70 per cent. shares till Jan. 1858, .....	107	109
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., .....	86	88
Little Miami 1st Mort. not conv. 6s, .....	—	—
Marietta and Cincinnati, 1st Mort., .....	—	—
Michigan Central, conv., 8s, 1860, .....	88	90
do do do 1869, .....	90	91
N. York Central. No Mort. Not conv., 6s, .....	79	80
" " conv., 7s, .....	89	91
Ohio and Mississippi, 1st Mort., .....	—	—
Ohio and Pennsylvania, Income 1872, .....	68	70
Panama. No mort. conv. 1866, .....	—	—
Pennsylvania, 1st Mort., conv., .....	89½	90½
" " Sterling, 2d Mort., .....	91	93
Stenberville and Ind., 2d Mort., .....	—	—

The quotations given are sterling quotations. The American values to be obtained by adding an exchange generally about 10 per cent

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending July 15, 1857.

Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, with interest, .....	80
Cincinnati, Hamilton & Dayton R. R. Co. 7 per cent. 1st Mortgage Bonds, .....	90
Do. 2d do do .....	83
Covington & Lexington R. R. Co. 6 per cent. 1st Mortgage Bonds, .....	68
Do. do 7 per cent. 2d Mortgage .....	66
Indianapolis & Cincinnati R. R. Co. 7 per cent. 2d Mortgage Bonds, .....	80
Ohio & Mississippi R. R. Co. 7 per cent. 2d Mortgage Bonds, .....	50 to 55
Hillsborough & Cincinnati R. R. Co. 7 per cent. 1st Mortgage Bonds, .....	50
Covington & Lexington R. R. Co. 10 per cent. Income Bonds, .....	62½
Indiana Central R. R. Co. 10 per cent. Income Bonds 95	
Marietta & Cincinnati R. R. Co. 7 per cent. Domestic Bonds, .....	35
Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds, due 1866, .....	85
Little Miami R. R. Co. Dividend Scrip., .....	81 to 82
Cin., Ham. & Dayton do do inc. int., .....	115
Indianapolis & Cin. do do do .....	70
Cincinnati 6s of 1884, .....	82

## A STOCKS.

Little Miami R. R. Co., .....	90
Columbus & Xenia, .....	90
Cin., Hamilton & Dayton, .....	68
Indianapolis & Cin., .....	62
Indiana Central, .....	50
Covington & Lexington, .....	18
Marietta & Cincinnati, .....	18
Hillsborough & Cincinnati, .....	18
Mad River & Lake Erie, .....	12½
Ohio & Miss., .....	11½ to 12
Junction (Ind.), .....	8
Cincinnati & Chicago, .....	2½
Southern Pacific, .....	\$2.50 for \$5.00 paid.
do do .....	1.50 for 3.00
Farmers' Bank of Ky., ex-dividend, .....	115
Ohio Life I s. & Trust Co. Bank, .....	100

## MONETARY AND COMMERCIAL.

During the past week no special changes have taken place in financial matters. "Gilt edge" readily finds purchasers at usual rate of ten per cent. Second class paper, with fair endorsers, can be readily negotiated at from 1 to 1½.

Being harvest time, and the reports of crops very cheering, the tendency is to a much easier state in the money market than the country has enjoyed for some time.

The custom which our brokers have of sending home for redemption every dollar of foreign paper on which the slightest commission can be made, still continues to a great extent, although not so generally or with so much profit as when exchange ruled higher. Many of our best houses, previous to making their regular de-

posits, will permit their funds to be called by the brokers of such as those above mentioned. While this state of things exists business men should not complain of houses having capital if they are charged a little more than in other cities for exchange. In St. Louis the rule of exchange is ¼ per cent., never varying. This is a remunerative price, and when the system of redemption practised here is abolished, we may expect our exchange market to become more settled and regular.

The arrival of the steamer "Star of the West," with one million and a half of specie and California dates to the 20th ult., is noted. She brings nothing of special interest.

In the New York stock market we notice no special change. Money is in good supply, at 8 to 9 per cent., for business purposes.

We subjoin our usual quotations from Hewson and Holmes' stock circular:

The movement of the stock market in the past week has been more active, and transactions evince more firmness on the part of operators in the early improvement in prices, and the full restoration of confidence in first class securities. This feeling is mainly based upon the abundance of the harvest, which is now in progress in the Southern part of Indiana and Ohio and throughout Kentucky, and some samples of wheat, barley and rye have already made their appearance on the Exchange, which fully realize in quality the anticipations previously expressed. The crop of all the small grains will be larger than any previous year. The movement of these crops will soon tax Western roads to their utmost capacity. The discussion of the crops is the all-absorbing question with all classes; and from every quarter comes up the most flattering accounts as to quality and productiveness.

Little Miami shares have sold to some extent at 90, at which rate there is a moderate demand; Hamilton & Dayton quiet at 67 to 68; Indianapolis & Cincinnati shares are very quiet at 62—most of this stock is held out of the market, in expectation of an early dividend of 4 per cent., which it is understood this company designs declaring out of the earnings of the past six months.

In Bonds the sales have been small, including Little Miami 6s at 80 and int.; Covington & Lexington 7 per cent. 2d mortgages at 66; Ohio & Mississippi 2d mortgage Construction Bonds are held at 55, but sales have been made as low as 50.

The earnings of the Covington & Lexington Road for the past month show a very decided and gratifying increase over the corresponding month of last year. Earnings for the month of

June, 1857, .....	\$34,863 50
June, 1856, .....	29,754 65

Increase, .....

The money market is slightly easier, but none but first class paper can be negotiated at fair rates; other signatures are passed with great difficulty at 1½ to 2 per cent. per month.

Eastern exchange is in moderate supply at ½ to ¾ premium, at which the market is firm, with a fair demand. New Orleans funds are nominally ½ to ¾ discount, with very little demand.

## SALES AT THE NEW YORK STOCK BOARD—July 13.

\$11,000 Tenn. State 6s, '90, .....	82
38,000 Mississippi State 6s, .....	77½
1,000 California 7s, 1875, .....	53
1,000 Erie R. R. 1st mort. Bonds, .....	100
1,000 La Crosse & Mil. Land Grant Bonds, .....	50
2,000 Lake Erie W. 1st Mortgage, .....	47
8,000 Terre Haute and Alton 2d mort. Bonds, .....	63
1100 shares New York Central, .....	80½
30 " La Crosse & Milwaukee, .....	38
20 " Pacific Mail St. Co., .....	74½
260 " Erie, .....	24
210 " Harlem R. R. stock, .....	10½
40 " Harlem R. R. pref., .....	23
200 " Reading, .....	77
100 " Galena & Chicago, .....	92½
400 " Mich. S. & N. Ind., .....	47½

100 " do do do pref., .....	75
100 " Illinois Central, .....	120
100 " Cleveland & Toledo, .....	58
200 " Chicago & Rock Island, .....	91½
150 " Milwaukee & Miss., .....	51½
6 " Panama, .....	87½

MAD RIVER & LAKE ERIE R. R.—The earnings of the Mad River & Lake Erie Railroad for the month of June, and for the corresponding month last year, are as follows:

June, 1857, .....	\$52,941 9
June, 1856, .....	51,451 57

Increase, .....

CINCINNATI, HAMILTON & DAYTON R. R.—Earnings of the Cincinnati, Hamilton & Dayton Railroad for the month of

June, 1857, .....	\$37,546 05
June, 1856, .....	37,464 65

Increase, .....

From the Cincinnati Daily Volksfreund.

## NORMAN HOUSE AND PARK.

The entire absence of places for public recreation, of proper extent and style, has for many years been felt by all. We now hope to see something of the kind here—such places are so numerous in Europe, especially in Germany, that we are accustomed to consider them as almost indispensable.

A new plan has been called forth, which deserves general attention, for if it should be steadily adhered to and fully executed, of which we do not doubt, as the noble work has, at least up to this time, been promoted with laudable energy, it would meet the full approbation and receive the good wishes of thousands of our residents, attract the stranger from abroad, and be productive of both pleasure and profit. No wonder, therefore, the result is anxiously looked for. The facts are, in short, as follows:

A Joint Stock Company has been formed, with a capital of \$150,000, divided into shares of \$25 each, for the purpose of building a brilliant hotel, surrounded by park and gardens, all in a magnificent style. They intend to buy a site in the vicinity of the city; proposed is one about one mile North-West of Cumminsville, and half a mile South-West of College Hill. The grounds contain about 80 acres of land, are excellently adapted for that purpose, situated in that most beautiful part of the Miami Valley—the garden of the West—besides, it offers plenty of room for a vine yard, an orchard, for flower and shrubbery gardens, promenades, groves, arbors &c. Numerous beautiful springs and rivulets furnish water enough to meet all wants and for an artificial lake.

The house is intended to be 160 feet front by 180 feet deep, to be built entirely of stone, in the noblest modern style. The cost of such a palace has been calculated to be \$80,000, and would hardly reach this sum.

Indeed we were highly pleased on becoming acquainted with this plan; for such an establishment has long since been a want, and is now a necessity.

At present, the inhabitants of the "Queen of the West," whenever they need recreation, must look for such a place at remote distances—they find it only, with the necessary accommodations, at Watering Places, at great expense, and by wasting their time.

The proposed site is but few miles away, and if our hopes should be realized, and the plan before us succeed, we could invite our brethren and friends from the South, East and West, and find ourselves together, enjoy happiness in luxurious accommodations, among friends at home, in the immediate vicinity of the city. This is what sensible people are longing for; and this would do away with all the objections incident to, and inseparable from visiting remote watering places.

Further information can be procured by calling at the Office of the Norman Company, corner Sixth and Walnut Streets.



[From the Houston Telegraph.]

**HOUSTON & TEXAS CENTRAL RAILWAY.**

The "Fourth Annual Report of the President and Directors of the Houston & Texas Central Railway Company to the stockholders," a pamphlet of some forty pages, has been laid on our table. The report indicates a very flattering condition of the corporation. Our readers have from time to time been informed through our columns of the progress made by the Central Road. We content ourselves with a brief abstract of the information contained in the report before us.

The report opens with a brief reference to some of the difficulties encountered by the company in completing the first section of the road, and with a concise statement of the present position of the work.

Thirty-five miles of the road are in operation; fifteen more will be finished by the time the growing crop is ready to come forward. More than that is already graded. From the fiftieth to the seventy-fifth mile the leveling is done. This section embraces some of the most difficult ground on the whole line of the road. The engineers are now on the fourth and fifth sections, and beyond the Navasota.

A good deal of heavy work is to be done in the Navasota bottom; some large bridges to be built which will retard the work somewhat.

The company have drawn certificates for two hundred and fifty-six thousand acres of land, which are now being located in Cooke Land District, in the midst of as rich and valuable a body of lands as can be found.

The business prospects of the company are very flattering. By connections being made and to be made at this point, Houston, it is expected, will be made the point for exchanging the products of the coast, such as sugar, &c., for those of the interior, such as flour, grain, pork, &c. This business will all pass over the Central Road. Branches are in contemplation to Brenham, to Washington, to Anderson, and to Huntsville, and to other points, some of which are already in the hands of organized and working companies, and all of which will become feeders of this road. A connection at Houston is made with the B., B. & C. Road running west, and already in operation from Houston to Richmond, with fifteen miles further graded and iron for twelve miles and a locomotive on the way. Also, with the Houston Tap & Brazoria Road, which is daily looked upon with more and more favor, and the construction of which is beginning to be regarded as certain; also with the Galveston, Houston & Henderson Road, which twenty miles and a bridge will finish to connect Galveston with Houston; also with Sabine & Galveston Bay Company, whose road is to run from Houston direct to the Sabine, and there to connect with an extension of the Berwick Bay Road to that point. Connections are also anticipated with the Southern Pacific Road, and the Memphis, El Paso & Pacific Road, on both of which work is being pushed forward with considerable zeal.

From the fifty mile station (Hempstead), to which point the road is graded and will be finished during the summer, the distance by stage will be, to Washington, 17 miles; Independence, 22; Chappell Hill, 9; Brenham, 9½; La Grange, 45; Bastrop, 65; Austin, 94; Boonville, 30; Wheelock, 50; Alta Springs, 85; Springfield, 105; Marlin, 100; and Waco, 125 miles.

A line of steamers, direct from Houston to Berwick's Bay, running without breaking

bulk, is suggested, and is, in fact, a feasible enterprise.

The only liens on the road are, one to the State for one hundred and fifty thousand dollars, and one to J. H. Welles & Co. for one hundred and twenty-five thousand dollars, making two hundred and seventy-five thousand dollars, against which they have 512,000 acres of land, thirty-five miles of railroad complete, twenty miles more graded, depot buildings, &c., at Houston, Cypress and Hockley, two locomotives, three passenger cars, twenty freight cars, and nearly five hundred thousand dollars stock subscriptions still due.

The income of the road from September 14, 1856, to May 1st, 1857, has been, for

Freights	\$16,792 18
Passengers	13,149 25
Mails	674 95

Total.....\$30,616 38

Expenses for same time have been—

Running expenses	\$8,294 67
Repairs on rolling stock	1,667 00
Repairs on track	2,566 05
Office expenses	322 95
Damages for goods lost, &c.	607 32

Total.....\$13,457 99

Leaving us a total earned profit for eight months of \$17,358 39.

The appendix to the report contains the various acts by which the charter of this road has been granted and amended, and also the general railroad laws having a bearing on the prospects of the company. Altogether, the report is full of valuable information, and what the stockholders will be glad to read.

**PHILADELPHIA AND BALTIMORE CENTRAL RAILROAD.**

We have made sufficient investigations into the present position of advancement of this important work, to place the result before our readers, as promised last week. Some two years since, its projectors, composed of intelligent and enterprising citizens, of Delaware and Chester counties, convinced of its importance to themselves, individually, and to the entire community, and confident that a road running through so dense a population as one hundred and forty persons to a square mile, and with over two hundred and thirty mills and factories to use it for transport, would, when known, attract the interest of capitalists out of the counties, resolved to commence its construction in Pennsylvania. By an active canvass, a reliable stock subscription was obtained, and thirty-six miles of grading and bridging put under contract, extending from a point on the Philadelphia and West Chester Railroad, eighteen miles from Philadelphia, through the counties of Delaware and Chester, to the Maryland line. The stock was duly paid, in instalments, the grading and bridging finished, with some unimportant exceptions, and the work paid for at the original contract prices. The land for right of way was almost invariably either given gratuitously, or paid for in stock at par. The fencing is pretty much completed, and the cross-ties for nearly the whole track have been furnished, and all paid for, in stock at par, and the Company is entirely free from debt. Thus far, all has gone on well, and this road presents the unusual spectacle of having finished the grading and fencing, and paid for land and cross-ties solely upon a stock subscription by farmers along the line, without having asked the aid of city capital or contracting a dollar of debt. Hers is good old-fashioned prudence and country financiering, which puts to shame our city liberality and management. These simple

people think "pay as you go" is a maxim as wisely and usefully applied to railroad affairs as to private enterprises; they understand that, and stick to what they know answers well in their individual economy. They have heard of raising money by selling bonds at sixty to seventy cents on the dollar, but they can not exactly comprehend how railroads manage to avoid losing a third of their capital by this process, or how it is that a company can prosper and pay well, which costs thirty or forty per cent. more than it should have done, when Farming and Manufacturing are only successful by rigid economy, paying cash for every thing, and keeping out of debt. Certainly "Young America," reckless and impulsive, has not found its way into Chester county, or the principles of modern financiering have made slow progress there.

This Railroad, then, having been graded for thirty-six miles, \$100,000 of the bonds of the Company were sold in the two counties named at ninety cents on the dollar, payable by instalments in one year, in order to purchase iron rails for cash, and pay for laying the track. With these means, five hundred tons of rails have been bought and the track laying commenced. There is, perhaps, no example in the history of Railroads, where so much has been done with so little money, and where old maxims of thrift and caution have been so strictly applied to the conduct of a public work. Hence, in its cost thus far, there has been no disappointment, no failure nor deficiency of estimates, and all has come out pretty much as expected. If this sound policy is continued, the Company will construct their road at thirty to forty per cent. under the usual cost. The total expense of the 36 miles now graded seems thus to be a matter which can easily be ascertained with great exactness, inasmuch as the cost of grading and bridging—the only uncertain items in the construction of roads—has been defined by actual payment, and we have only to take these items now paid for, with land damages and fencing, and add them to the cost of rails, laying track, water stations, station houses, engines and cars, to obtain the exact total cost. By reference to data from the prepared annual Report of the Company, it appears that the cost of the work done already on the thirty-six miles to the Maryland line, is as follows:

Grading and bridging by actual outlay, per mile	\$ 6,150
Cross ties, do. do. do.	910
Fencing, do. do. do.	1,000
80 tons rail, per contract	\$5,760
Chains, spikes, etc., per mile	900
Ballasting road bed, do.	1,000
Laying track, do.	430
	\$8,090

Add 20 per cent. for equipment of engines, cars, stations, houses, etc.	3,230
---	-------

Makes per mile	\$19,380
Add for contingencies	620

Gives a total cost per mile of.....\$20,000 for the thirty-six miles of road all equipped for use.

This statement must appear entirely reliable as regards the cost of a road, the grading and bridging of which has been executed and paid for. An estimate almost as reliable is presented for the forty miles of the road in Maryland, where the location has been carefully made, and the quantity of work accurately ascertained, and proposals for it handed in by contractors of experience and ample means. The estimate based on such data gives for the cost of the road in Maryland, nearly \$30,000 per mile.



The estimated cost of bridging the Susquehanna River, three miles above the head of tide water, where the site is represented as remarkably favorable, and a very superior building stone can be obtained on the adjoining hills of granite, is put down at \$200,000. The foundation of all its piers will rest on solid rock, and as the depth of water in summer level, is generally but three feet and in no case more than six, the ease of securing a permanent foundation at a small cost, seems to be unquestioned. Taking then the average cost of the road in Pennsylvania and Maryland and adding the expense of bridging the Susquehanna, we have for the entire construction of seventy-six miles, equipped for use, a cost of \$2,120,000, or an average per mile of \$27,894.73, for a first class single track road. This estimate is presented by Major J. R. TRIMBLE, the Chief Engineer of the Company, whose long experience and high character entitle it to public confidence. We find that the cost of this road is about the average per mile of all the roads in Ohio, which are over 4,000 miles in length, as well as the New England roads, if proper allowance is made for the expenses of grading for a double track and remedying defects of original construction, machinery, stations and depots. The grading and bridging on most of our roads for a double track has resulted in a useless or premature outlay of about 20 per cent. on their cost, and this heavy item has been obviated by the application of the Telegraph as to the working of Railroads, since it is found that a single track managed by telegraph is safer and has more capacity than a double one without its aid.

It thus appears that thirty-six miles of the Central road in Pennsylvania has been graded, fenced, and supplied with cross ties, paid for or to be taken in stock at par, and have cost about \$350,000. Bonds of the Company to the amount of \$100,000 have been taken by citizens of Delaware and Chester counties at ninety cents on the dollar, payable in one year, by instalments, and with this fund, rails have been purchased and the track laying commenced, with the intention of opening the road as far as Avondale, in the heart of the agricultural wealth of Chester county, and thirty-six miles from Philadelphia. The company has never opened books in Philadelphia or Baltimore to solicit stock subscriptions, nor have they offered a bond for sale in these cities. Thus far they have paid for all the work done and are out of debt—a rare example of prudent foresight, when corporations are usually prone to contract debts and loans at heavy discounts, averaging it is not too much to say 33 per cent on their capital, in sales of bonds and excess of interest. This ruinous practice has sprung from premature efforts to contract roads, where credit had to be used in place of capital and from injudicious haste in pushing forward the construction of works beyond the capacity of the country to furnish funds to meet their cost. Is it a wonder that our railroads do not pay, when they have thus wasted one third of their capital? Could any private enterprise succeed by thus disregarding the plain maxims of prudence and economy; or is there any mysterious power which exempts railroads from the effects of indiscretion and extravagance, which would ruin private individuals? We know of none such, and the few solitary cases, where railroads have been well managed, only proves the truth of our position.

We have felt it our duty as public journal-

ists, to bring to notice this work, as one of *great national importance*, in which Philadelphia and southern Pennsylvania have a deep local interest. We have sought to bring from its seclusion an unpretending corporation which has on the resources of those on its route alone, begun, and for more than two years prosecuted the construction of one of the most important railroads along our seacoast, and of especial interest and importance to our city, as affording her commercially, socially, and politically, a safe, rapid, and cheap connection at all seasons, with the South and the seat of the Federal Union at Washington. We shall, in the furtherance of our object, next present some interesting and valuable statistics relating to the sources of revenue and profit for the Philadelphia and Baltimore Central Railroad.

#### ATLANTIC TELEGRAPH CABLE.

We have been favored by the contractors for the Atlantic telegraph, with a piece of the cable for the deep sea. This cable consists of a central copper strand of seven small copper wires of No. 23 gauge, acting as the conductor through which the signals are to be transmitted. Owing to the retardation which experiment has disclosed to exist in large wires, these small wires are found necessary. Each or all seven together act as a conductor. The strand of the seven copper wires, about one-tenth of an inch in the cable diameter, is surrounded with a coating of gutta percha, averaging about 0.15 inch thick. This gutta percha is again closely and tightly covered with 18 strands each, consisting of 7 iron wires, the object of which is to protect and keep close the gutta percha round the conducting strand of copper, and to give strength to the cable. To prevent the oxidation of the iron wire under water, which unprotected would be rapid, a mixed solution of Stockholm tar and pitch, well rubbed in, coats the iron strands.

From the specimen before us, the cable is exceedingly well made, and though compact and strong, is sufficiently flexible. Its weight is 19 cwt. to a mile, and Messrs. Kuper & Co., who have 1260 miles to make in one length, and to lay in the Atlantic, are to have it on board ship by the end of next June. The other portion of the cable is making in America, and will start about the same time from the American side, to meet midway the vessel carrying the English portion of the cable.

A sort of plateau of sand has been discovered running across the Atlantic, on which the cable is to be laid. The greatest depth by soundings appears to be 2070 fathoms, giving a pressure of water per square inch of 6210 lbs, or nearly three tons.

Two causes of apprehension existed with regard to the success of a telegraphic communication across the Atlantic. One was, that the great pressure of water would penetrate any supposed insulation of the conducting wires, and consequently disperse or so weaken the magneto-electric current as to prevent the action of the needle on the other side, or it might so change the molecular arrangement of the copper particles as to materially interfere with, if not destroy, the transmission of the signals. Mr. Glass, however, informs us that a pressure of four tons to the square inch has been used on the cable, and no sensible disturbance produced, which of course disperses to the winds the first apprehension.

The second apprehension arose from an ex-

perimental fact, on the Anglo-Belgian submarine cable, that the signals transmitted through a cable submerged to any depth suffered a very sensible retardation and lingering, in only about 300 miles. From this fact it was therefore feared that in a cable of ten times the length, exposed to much greater depths and pressures, the definition of the signals, if they should ever reach the opposite shores, would be so feeble and imperfect as to be unintelligible, and so slow in their transit as to be comparatively useless. Mr. Whitehouse, however, the engineer of the Company, has, by sending alternately positive and negative currents, obviated greatly, if not wholly, this difficulty, increased the number of the repetitions of signals, and sharpened their definition. He seems to think that the alteration of opposite currents clears out the wire from any lingering remains of the preceding signal. Whether this be so or not, if the lingering action be destroyed, a greater number of signals can be transmitted, and the grand desideratum of the telegraph—instantaneous transmission—be more nearly approximated.

Our government, it is known, proposes to allow the Company £14,000 a year for such use of the telegraph as it may require. The American government is said to have consented to allow an equal sum, which together will give 9½ per cent. on the estimate of £300,000. —*Herapath's Journal*, No. 923.

#### PRESENT STATE OF THE BESSEMER IRON QUESTION.

It is only some few months since all Europe was standing on tiptoe, in expectation of witnessing a great and marvellous revolution in the manufacture of iron and steel, by a new and ingenious process, to which it is only necessary to allude in passing, as that patented by Mr. Bessemer. It was something quite astounding to those who knew by what tedious and expensive means steel was produced from iron in the olden time, to be told that, by the new process, steel was the easier and cheaper production of the two. It was no less wonderful in the eyes of those who had considered iron as, at least in the open air, an incombustible, to be shown that it was in fact, a highly combustible material; and that, if once heated by fire to a certain point, it might then by strong air currents be actually *itself set on fire*, and made to burn with a fierce incandescence.

It is humiliating to think upon what small matters great ones often depend. There appears to be no reasonable doubt that Mr. Bessemer would have realized all he promised to accomplish but for one slight circumstance, which it is our intention now to explain, and the difficulty connected with which has, at least for the present, frustrated his expectations.

The subject of iron founding has been so completely popularized by the discussions of this patent in the public press, that it will only be necessary for us to recall attention to the fact that iron ore contains several foreign matters in intimate combination, and that upon their expulsion during the founding process depends the success of the ironmaster's work. These foreign bodies are chiefly carbon, silicon, sulphur and phosphorous. The old method of roasting, casting, refining, puddling, and rolling were found to effect the object in view sufficiently for all practical purposes. In Mr. Bessemer's process all these substances, *except phosphorous*, are effectually



expelled. It would seem that up to the present time this material has resisted all the efforts of Mr. Bessemer. It defies the utmost heat of his furnaces, and has no sufficient affinity for oxygen, or any other body brought in contact with it, to consent, for its sake, to let go its tenacious grasp of the iron. Now, phosphorus in iron is, as it appears, fatal to the useful qualities of the metal; it renders the iron brittle and unserviceable; and as no portion of it can be detected in the slag of the furnace, it would seem that, so far as its expulsion is concerned, Mr. Bessemer has as yet altogether failed. But it would surely not be at all philosophical to conclude that the question is finally set at rest, however serious the objection may be to which we have now called attention. It can hardly be too much to expect that in the resources of modern science some ingredient may yet be discovered, the result of which, in the instance before us, will be no less striking than those of soda, borax, and potash, when used as fluxes in various industrial operations. We should not be surprised any day to hear that some such depurative had been discovered, and that its admixture with the incandescent iron in the furnace was found to detach the phosphorus, and leave the iron in a perfectly pure state. We wish we could go further than suggest the existence of some such drug, or metal, or mineral, whatever it may be. We suspect that the man who could go further than this, and supply Mr. Bessemer with its local habitation and its name, would participate largely in a most lucrative as well as scientifically honorable discovery.

We could ourselves easily indicate certain metallic combinations which, in dealing with phosphorus in its uncombined state, possess the power of neutralizing its caustic properties; but this may be far indeed from indicating a power in such preparations to deal with that wonderful substance as it is found in nature, united with the crude oxide of iron. Indeed, we take for granted that men of the highest mark in chemical science are just now eagerly devoting their attention to this interesting problem; and, as we have said, we look forward rather hopefully than otherwise to the result.

We are very far from participating in the triumph expressed by many at the partial, and in truth, temporary failure in the expectations raised in the public mind by Mr. Bessemer and his discoveries; but it is still true that up to the present time the "revolution" has not come off. The new aspirants for dominion in the realms of metallurgy—we mean, of course, airblast and oxygen, have not as yet been able to wrest the sceptre from the hand of "Old King Coal." His carbonaceous majesty is still "master of the situation," how long he may continue, we by no means venture to take on ourselves even to conjecture.—*N. Y. Tribune.*

**PREVIOUS SALES OF STATE WORKS.**—The resolutions of Councils authorizing Mayor Vaux to vote, as the representative of the city, on its Pennsylvania Railroad stock, in favor of the ratification of the purchase of the Main Line by the Directors, settles the question finally as to the action of the meeting of stockholders to be held on the 20th instant. There seems to be a doubt in some quarters as to the right of the Legislature to sell or give away the property of the State, but the Railroad and Mining Journal refers to different Acts of Assembly under which public

works built by the State have been conveyed to corporations, for a money consideration in one case and without a money consideration in other cases, which makes the course clear for a conveyance of the Main Line, according to the provisions under which its sale was effected. A new road having been built to avoid the Schuylkill inclined plane, an Act was passed 10th May, 1850, authorizing the Canal Commissioners to sell and convey the Schuylkill viaduct and level, extending from the inclined plane to Broad street, three miles; and under this Act the Canal Commissioners, in 1851, sold the viaduct and level to the Philadelphia & Reading Railroad Company for the sum of \$243,200. Under the Act of 7th March, 1843, the State conveyed to the Erie Canal Company, a private corporation, without any consideration in value being received therefor into the public treasury, 136 miles of canal between Beaver and Erie, including 27 miles of feeder canals—making, altogether, 163 miles of canal, upon which the State had expended four and a half millions of dollars. The State also conveyed to a private corporation, the Wiconisco Canal, 12¼ miles long, without receiving in money any consideration therefor. The State, moreover, occupied private property to build the West Branch Canal, west of Farrandville, and, without completing the work, authorized the Sunbury & Erie Railroad Company to take possession and lay down an iron track in lieu of the canal begun but not finished by the State.—*Pennsylvania.*

**RAILWAY ACCIDENTS IN GREAT BRITAIN.**—In the course of a recent debate in the British House of Commons, Mr. Lowe stated that, in the year 1852, out of 89,000,000 persons who were carried by railroad, 10 were killed and 372 injured; in 1853, 102,000,000 travelled by railroad, 36 were killed and 280 were injured; in 1854, 114,000,000 travelled by railroad, 12 were killed and 331 injured; in 1855, 118,000,000 travelled by railroad, 10 were killed and 331 injured; and in 1856, 125,000,000 travelled by railroad, 8 were killed and 282 were injured. Under these circumstances the Government did not see any reason for legislative attention to the subject.

**BALTIMORE & OHIO R. R.**—The monthly report of the business of the road, giving the amount of freight transferred eastward into Baltimore during the month of June, and the amounts received for passengers and freights for the month is as follows:

Bark, 1,097 tons; coal, 57,819 tons; fire brick 270 tons; flour, 20,809 bbls.; grain, 420 tons; granite, 495 tons; iron, 529 tons; iron ore and manganese, 870 tons; lard and butter, 35 tons; leather, 136 tons; wool, 1,389 bales; soap stone, 151 tons; lard oil, 162 tons; lumber, 1,815 tons; lime, 25 tons. Live Stock, viz: Hogs, 12,665 head; sheep, 10,725 head; horses and mules, 17 head; horned cattle, 1,700 head; meal and shorts, 107 tons; pork and bacon, 1,004 tons; tobacco, 2,435 bbls.; whisky, 9,505 bbls.; miscellaneous, 631 tons; hay, 22 tons; hemp, 75 bales; flour from Washington Branch, 30 bbls.

The revenue for the month has been as follows:

	Main Stem.	Washt'n Branch.	Total for both roads.
For Passengers.....	\$ 64,717 44	\$26,889 11	\$ 91,606 55
For Freight.....	322,925 74	9,390 26	332,316 00

\$387,643 18 \$36,279 37 \$423,922 55  
During the month of June the receipts on the Northwestern Virginia Railroad, or Parkersburg Branch, were \$3,307 40 for passengers and \$6,274 77 for freight, making a total of \$9,582 17, which, added to the receipts of the main stem, makes the total receipts \$433,504 72.

The report of the Masters of Machinery and Road shows that the estimate for July for expenses of the road and branches will be upwards of \$300,000.

✎ The bondholders of the Albany & Salem R. R. Co. have taken initiatory steps to foreclose their mortgage and obtain possession of the road.

**GALENA & CHICAGO UNION R. R.**—The earnings of the G. & C. U. R. R. for June, 1857, were as follows:

Freight.....	\$163,554 47
Passengers.....	72,110 90
Mails, &c.....	7,256 03
Total.....	\$249,221 40

**PENNSYLVANIA R. R.**—The monthly statement of the Pennsylvania Railroad exhibits the following results: Receipts of the road for the month ending

June 30th.....	\$366,963 88
Same month last year.....	244,291 55
Increase.....	\$122,672 33

Receipts from January 1, 1857, to July 1, 1857.....\$2,518,783 37  
Same period last year.....2,525,527 16

Decrease.....\$6,803 79

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern. 32 to 59 lbs. per lineal yard, now at New Orleans, for sale by  
VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.  
feb19-1m

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

## SILVER, GOLD, LEAD, And Other Minerals.

ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TEBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the Sonora Exploring and Mining Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residuum is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti. O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

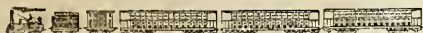
WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent.

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK, Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, etc.

Office No. 15 Walnut street, Cincinnati, Ohio

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

**Also.** Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door west of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent. Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:20, 4 and 6:20 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities.—Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M. INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

## NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M. MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburgh, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via Clyde, through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:20 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:20 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

## BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8 A. M. and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:30 A. M., and 12:15, 3:45, 6:15 and 10:25 P. M.

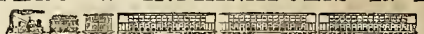
For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntingdon, Wabash and Toledo; also Logansport and Lafayette.

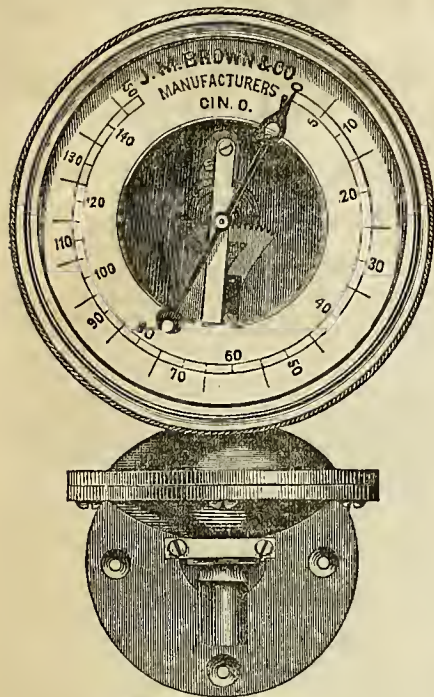
Passengers coming South from T., W. & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Frtght. Ag't.  
Indianapolis, Sept. 16, 1856. [mh29-1y.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.  
THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
DRILL THE TUBE-PLATES  
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whistle Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tuiyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Ties, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

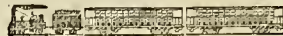
THOMAS PROSSER & SON,  
82 PLATT STREET, New York.



Frank T. Foster,  
Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GOODMAN & CO.,  
no. 7 Wall st., N.  
Feb. 7. '56-2m.]

## RAILROAD CAR

AND

## COACH TRIMMINGS. DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush.

Printed & Unent do., Entirely New Designs;  
MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width.  
Oil Cloths for Head Linings, Enameled with Gold and Silver.

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING

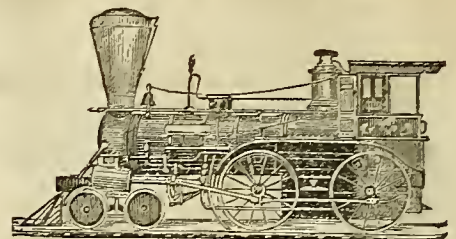
N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON

W. C. ATKINSON,  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.  
mar1-ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue; Paints, Varnish and Glue Brushes

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

## Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.  
+oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Engines, Garden Engines and is, for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

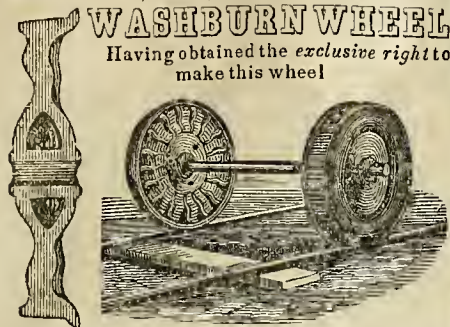
Orders thankfully received and promptly filled at the shortest notice

SILVER MEDAL. (The highest prize) awarded to these pumps at a Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1853-1



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

**LOCOMOTIVE HEAD-LIGHT,**  
Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Brest, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS.

Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c..

**Steam and Water Gauges,**  
Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE.

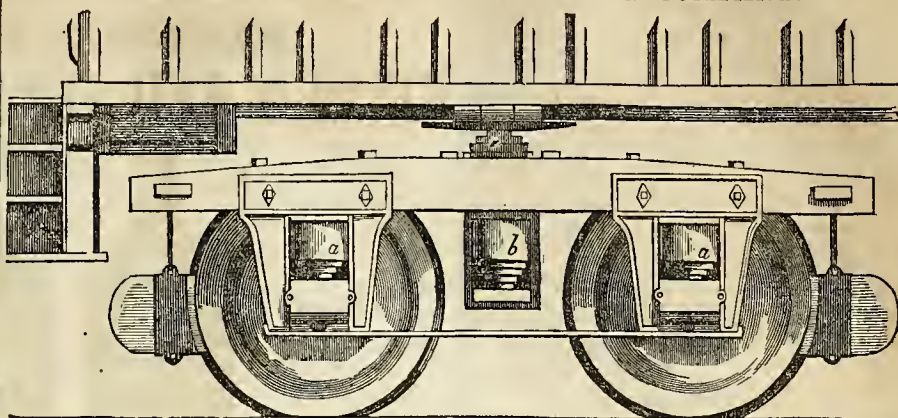
Baggage Barrows and Checks, Freight Trucks,  
**CAR FINDINGS,**  
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED.

cc23-17

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of orders for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL

### DAVENPORT, RUSSELL & CO.,

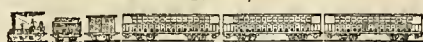
### Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* JOSEPH DAVENPORT.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice,

for **Passenger Cars of the most superior description,**  
Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight-wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Zanesville, O.

Jan 1.

### S. C. THOMSON & CO

MANUFACTURERS OF

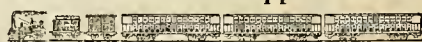
### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars

Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,  
1 n24 NEWARK, N. J.

### Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
Robert Harris, Sup't.  
Racine, May 15, 1857.

### Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the **Ohio and Mississippi Railroad.** Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening trains. The 6:30 and 2 P. M. Trains both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-1y

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in hand, or duty paid. For sale by

THEODORE DEHON,  
feb5-1f 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

**JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.**

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 2d street, N. Y.

**T. F. RANDOLPH & BRO.,  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.**

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR  
**RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building

**The Great Arnold Secret Discovered at Last**

**BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**



edgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. **RECORD**—For Ledgers and Records only. **MERCANTILE**—For Books, Letters, and General purposes. **COPYING**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

*Transportation Office, Cincinnati, Hamilton & Dayton Railroad.*  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana; and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,  
KEEP constantly on hand a large and well selected  
assortment of everything in their line which they  
offer on favorable terms.**

**RAILROAD AND OTHER BLANKS.**  
Printed to order in the best manner.

**Ruling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,  
Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 225 H Street, Washington, D. C.

ap12

**Thorough Bred Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,  
"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JULY 23, 1857.

## Railroad Record.

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 22.

#### EDITORIAL.

Agricultural Machinery and its Effects.....	349
The Silver State.....	349
Dust.....	350
High-backed Cars.....	350
Editorial Correspondence.....	351
Chicago, St. Paul & Fond du Lac R. R.....	351

#### RAILROAD DRAUGHTS.

Florida Atlantic & Gulf R. R.....	351
-----------------------------------	-----

#### RAILROADS.

Chicago, Burlington & Quincy R. R.....	352
Florida Atlantic & Gulf R. R.....	353
Little Schuykill R. R. & Navigation Co.....	354
New York Central.....	359
Fox River Valley R. R.....	360
Wabash Valley R. R.....	360

#### MISCELLANEOUS.

Cost of Power.....	355
Allen's Electro-Magnetic Engine.....	355
Commerce of the Country.....	357
The Planet Saturn.....	359
A Railroad Decision.....	359
Prof. Salomon's New Machine.....	359
Science in France.....	359
Commerce of New Orleans.....	369

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	356
London Quotations.....	357
Monetary and Commercial.....	367
Sales at the New York Stock Board.....	357
Cincinnati Stock Sales.....	357

MR. MORAN to-day accepted the Presidency of the Erie Road, to which he was elected on Saturday. The salary was fixed at \$25,000 per annum, the largest salary, we think, paid by any corporation in this country. Mr. Daniel Drew having resigned the Treasurership, the vacancy was filled by the election of Mr. Hermann Gelpcke. Mr. Moran enters at once upon the duties of his office.—*Tribune*.

THE COMMERCE OF NEW ORLEANS.—Comparative statement of the value of imports through the custom-house at New Orleans for the fiscal year ending June 30, 1856 and 1857:

Year ending June.....	1856.	1857.
Dutiable.....	\$8,996,583	\$10,417,035
Free.....	6,417,566	6,637,076
Specie and Bullion.....	1,775,148	1,927,039
	\$17,183,327	\$24,982,149

We presume that the heavy increase in dutiable goods this year over last is owing to the failure of the Louisiana sugar crop, which induced large importations of foreign.

### AGRICULTURAL MACHINERY AND ITS EFFECTS.

The last ten years has witnessed a great revolution in Agricultural Arts; or, rather, before that there were no Agricultural Arts except the plow and the grist mill. Now agricultural machinery has been so extensively introduced that several factories have been erected in Ohio and are doing a large amount of work merely in making agricultural machines. The origin of the introduction of these machines is quite recent. It is not fifteen years since Mr. McCormick, of Va., came to Cincinnati with a Mower of his own invention. He was introduced to us, and (having full faith in the possibility of making and using agricultural machinery with great profit) we attended an experimental trial back of Covington, Ky. The result was entirely successful, and it was demonstrated to us, at least, that this sort of machinery must take the place of manual labor in all large farms.

Mr. McCormick went with his Mower to Chicago, that he might have access to the more extensive fields of Illinois, where he supposed they would be most profitable. There they were speedily introduced, and he was eminently successful. After this McCormick's Reapers and Mowers were exhibited at the World's Fair, and the American machines were regarded as one of the most valuable of practical inventions. Since then the career of agricultural machinery has been onward, and the revolution brought about in this country, and especially this State, is most extraordinary.

Six years since, in Ohio, there were very few agricultural machines—now there are a great number. The machines here introduced are Mowers, Reapers, (combined,) Threshers, Cultivators, Drills. The effect of these in doing the work of men it is hardly possible to estimate, although it must be very great. A Mower, with two horses and two men and boy, must accomplish the work of at least twelve men. If so, it must save the labor of five men at least. Now we know of one county which has 350 Mowers and Reapers, and they must save the labor of about 1,800 men! In the State at large there must be about 8,000 of these machines, thus saving labor of 40,000 able-bodied men. Supposing that they are employed only two months in the year, for harvest only, they will save, in money paid for labor, about \$2,500,000 per annum. The interest on their cost will be about \$70,000 only; so that there will be a net absolute gain on them of more than two millions per annum. If we look to the prairie States the saving will be much greater. In the United States at large probably the labor of 300,000 able-bodied men is saved during two months in the year. This is equal in money to twenty millions of dollars per annum.

This saving, too, is made in the last five years. But the saving of money is by no means the most part of the saving. The economy of labor is, in our modern civilization, of the highest value, without reference to the money or marketable value. We have already referred, as our readers will remember, to the tendencies of our present civilization towards centralization in cities and towns. This is really, and without theory, drawing large portions of our rural or country population to the towns. This is diminishing the agricultural laborers, while it increases the towns. The consequence is that both in America and Europe the relative proportion of cultivators is continually diminished. If we suppose this process to go on like a mathematical series, without arrest, the consequence would be ultimate starvation; but, of course, the preliminary symptoms of such a calamity would be sufficient to drive many from the cities to the country, and thus change the current. Still we must regard the invention and success of this agricultural machinery as a providential interference to avert for a time the alternative of starving in cities or returning to the country.

### THE SILVER STATE.

THE NEW SILVER COUNTRY OF ARIZONA.—Some of our credulous contemporaries are giving currency and color to the otherwise vague and irresponsible reports of the abundance of silver in the Gadsden Purchase. Against these vague rumors we interpose the official testimony of such men as Gen. Kearney, Col. Emory, Col. Fremont, Col. Cook, Kit Carson, Lieut. Beale, and last, though not least, Mr. Bartlett, of the Mexican Boundary Commission. From the personal observations of these and other United States officers, to say nothing of private citizens, who have traveled through this territory of Arizona, we are satisfied that it is one of the poorest and most God-forsaken regions in the world, in water, timber, gold and silver—the very next thing, in fact, to an African desert. We therefore caution all persons interested in silver mines to await the definite location of these wonderful mines of Arizona before investing in them, otherwise they may turn out like the Mexican silver mine of Dr. Gardner & Co., a regular swindle.

The above we take from the New York Herald of the 15th inst. From the well known influence of that sheet, it would be expected that no statements should appear in its columns unless the evidence quoted fairly established the truth. More than this, it is but reasonable and just that any print, before undertaking to influence the minds of its readers, should do so understandingly. In having sufficient proof for the above assertions, we think the Herald signally fails; and, while we are no more disposed than that sheet can possibly be to give credence to the tales of every fortune hunter, still we are desirous that the matter should be thoroughly investigated, both for the sake of those who have invested and may wish to invest their means in that direction, and for those who may wish to emigrate to the Territory of Arizona.

For the information of some it may be necessary to state that the territory in question is that known as the Gadsden Purchase. If, as the Herald would impress us, this large tract of land is "the very next thing to an



African desert, our Commissioner certainly made a very bad bargain.

But is this so? Let us see what authorities heretofore considered very reliable say upon the matter:

In 1826-7 H. G. Ward was Charge D'Affaires of His British Majesty to the States of Mexico. He was never interested in any mining company, but, under the instructions of his government, he reported on the fertility of the soil and the mineral wealth of these States.

On page 568, Vol. 2, of his published report, Mr. W. says: "To the north of Cinalva Sonora commences, and embraces the whole space from the shores of the Gulf of California to the confines of Durango and Chihuahua, upon the table land (between 27° and 34° of North Latitude), comprehending in this vast extent of country almost every possible modification of climate—the heat being varied in proportion as the platforms are more or less raised above the level of the sea."

Same Vol., page 598, he says: "The whole of this country is rich in every variety of agricultural produce; for, besides wheat, maize and barley, the sugar cane grows in the valleys, with figs, pomegranates, peaches, grapes, and numberless other fruits; horned cattle, mules and horses abound throughout the province, and may be purchased at about one-fifth the price usually paid for them in other parts."

This much in proof of the natural fertility of the soil; and, while we admit that for some time, on account of the Indian troubles, the country may have been abandoned comparatively, yet this is no reason why American vigor and enterprise should not restore the land to its wonted fruitfulness.

The reputation of the part ceded to the United States for mineral wealth is world wide, and it was a common cause of complaint amongst the Sonorans that their government had sold to ours the most valuable portion of their State.

To this testimony we have added that of Judge R. A. Wilson, of Rochester, N. Y., formerly of California, who, in his work, "Mexico, its Peasants and its Priests," fully confirms the reports of the *immense mineral wealth* of the country, and also certifies to its fertility.

As to the testimonies to which the *Herald* refers in this matter, we should be pleased to have them thoroughly and carefully examined; and while we do not claim that the whole of our new and valuable territory is a "Garden of Eden," neither can we admit the entire reliability of the statement that "it is a barren desert and God-forsaken region." But, were we deprived of all proof prior to this time, we are favored with the evidence of those now living in that territory. In March, 1856, a company was formed in this city for the purpose of exploring the mineral portion of that

territory, and reporting upon the general features of the soil, climate, etc. Connected with this company were reliable men, experienced in that territory, and withal good engineers, chemists and mineralogists.

Since their arrival at the territory, in July, 1856, their reports have been monthly forwarded and published, and all tend to show the truth of the fact that the country is just such an one as the authors we have quoted have declared it to be.

If, then, this company, which is the first that has successfully attempted to reopen these mines for 100 years, can give such flattering evidences of the wealth of the country, what may we not expect when much of our population shall have concentrated their wealth and energies in that section? The opening up of these vast supplies of silver (now the scarcest of the precious metals) are of incalculable benefit to this country; and, from the past evidences we have had of the energy of an American people, we believe we shall soon see the predictions of the Englishman Ward verified, viz: "that in 20 or 30 years the silver mines of Mexico would be paying an immense revenue to the American people."

The practical manner in which this company is now developing the resources of the new territory is doing more to give the people information concerning that for which their funds have been expended than even the government; and we are assured, from the character of those connected with the enterprise, that they will at any time permit any fair investigation, for the purpose of establishing the truth of the reports which they are circulating.

The *Herald* may throw much light on the subject by answering the following inquiries: How near to the silver regions did General Kearney pass? Was not his course along the river Gila, which is north of the most valuable portion of the purchase?

Maj. Emory accompanied Gen. Kearney on that expedition, but has since been Boundary Commissioner, and both he and Lieut. Michler, who was connected with him, state, in conversation, the very opposite to the *Herald's* assertion. Will not the *Herald* give their testimony a little fuller examination? What year or years were Col. Fremont and Lieut. Beale in that country? Did Col. Cooke's route pass through the silver region, or did it go the east and north of it? When was Kit Carson in that section, and if ever there, what time or talent had he for exploring the mineral resources of the country?

Did the *Herald* get Commissioner Bartlett's report from his printed report of that survey? In Vol. 2, Page 304, after describing the dilapidated appearance of Tubac, (now the head quarters of the Senora Exploring and Mining Co.) he says: "The bottom lands near it, along the Santa Cruz, are quite rich, and can be made to produce the same grains, fruit and vegetables as at Tucson. At the Rancho

of Calabasa, in the same district, is a gold mine which was once productive, but the fear of the Apaches led to its abandonment." On the 1st of January this year, the troops of the U. S. stationed at Calabazas under command of Major E. Steen, were taking gold from the mine referred to by Bartlett."

Accumulated evidence to establish the truth of the favorable reports concerning this "region of silver" might be adduced. But one more reference is sufficient here:

In the report of Col. A. B. Gray, of a survey of a route for the Southern Pacific Railroad, speaking of the San Pedro Rancho, he says: "Abundant springs and large districts of grama are frequently met with."

"During an encampment of a month, in 1851, at what we called the San Pedro Springs, some miles below our present ford, our animals recruited, and fattened rapidly. It is a fine grazing region with wild cattle, and mustangs constantly seen roving over the plains.

"The mountains and hills are covered with splendid timber, of the largest size, and for all purposes; the valleys are full of springs and the finest grass grows. It (our route) passes through the most desirable region, with the hills and mountains for forty miles, containing inexhaustible quantities of timber," among which the names "tall cedar, oaks of every description, pine, spruce superior white ash, walnut and gigantic cotton wood.

"The mountains in the neighborhood are filled with minerals, and the precious stones are said to abound. The famous Planches de Plata and Orrizonia Silver Mines are in this section of country, and at several of the old ranches and deserted mining villages which we visited, were found the argenteries (silver bearing, lead ore and gold.)"

**DUST.**—It seems to us very strange that so little effort is made this year to obviate the greatest inconvenience of railroad traveling—the intolerable dust of the dry weather. The roads have either given up the attempt, or care not whether they succeed or not in alleviating this evil. If nothing better can be discovered, the common canvas screens down the sides of the cars should be adopted on all passenger trains without delay. This will carry the great bulk of the dust to the rear of the train, and add much to the comfort of railroad traveling.

**HIGH-BACKED SEATS.**—Theoretically, high-backed seats for night traveling should be comfortable things; but the experience of a night on the Erie R. R. in one of those huge, unsightly looking things, leads us to believe that their comfort is all theory and no practice. The reason is plain enough to one occupying them. The curve of the back that is suited to one person is very uncomfortable for another; while the angle at which they are forced to be kept is entirely unfavorable for rest. The result is that the whole system is wearied with a distorted position, which cannot be changed. For ourselves, we prefer the ordinary seat for night as well as day riding. Future improvements may change our preference.



## EDITORIAL CORRESPONDENCE.

NEW YORK, July 16, 1857.

We are out again, and in the stream of travel that usually goes by the name of *pleasure travel*, if anything in this age of speed and dispatch is worthy of such a pleasant cognomen. The more we see of railroading, and the more we converse with practical railroad men on the tendency of our present system of passenger travel, the more fully are we convinced of the fact that the system itself must undergo a radical change. It will be readily conceded that expenses of running fast trains, including wear and tear of road and machinery, is much greater than those of slow trains. That it is the lightning trains that wear out the road and equipment, and that the expenses of roads are rather proportioned to the speed than to the amount of business done. Such being the actual fact, it seems to us but a natural conclusion that it would be wise and fair for railroads to charge passenger and freight transportation both in proportion to the speed at which they are transported. By the present system the passenger who rides thirty miles per hour pays no more than the one who rides only eighteen; and yet the transportation of the former costs the roads a much greater sum. Now there is neither right nor justice, nor interest to subserve, in the present state of things. It certainly is neither right nor just that one class of traffic which is remunerative should be made to supply the deficiency in another which does not pay and cannot be made really remunerative. We believe in charging everything to its right account, and charging for every class of business a reasonable advance on its actual cost. The result would be a slight decrease in the rates of fare on the mail and way trains and an increase on the lightning trains.

But, apart from the consideration of right and justice, as between the managers of railroads and the public on the one hand and their stockholders on the other, no consideration of interest claims the continuation of the present system. An illustration of the fact can be found in the present state of travel on the Erie R. R. Its managers have reduced the fare on this road to about *one cent per mile* per passenger. This is confessedly *less* than actual cost to the road, and was adopted as a trial measure to induce travel over this road—an *experiment* in railroading which we consider of doubtful expediency. The result to the Erie Road has been either no increase in the passenger traffic at all, or so slight a one as to be of but little advantage in the argument in favor of too low fares. We would like to present the following problem in the particular rule of Arithmetic that in our days was called *RULE OF THREE*:

If a road loses money by carrying one passenger at the rate of one cent per mile, how much will it gain by carrying a thousand at the same rate?

The crops look fine all over the country. There is, everywhere that we have seen, a heavy crop of grain and grass. Corn is, however, backward; much of it through New York is not over a foot high, and will not come to much, unless the weather is favorable for the next month or six weeks.

New York, the great Babel of the country, is emphatically crammed with strangers. The hotels are all full. We went to the Metropolitan, hoping to get that accommodation that far up town that we could hardly expect in the down town hotels. The first night they gave us a 7×9 apartment somewhere in the story next to where the comet is first expected to be seen, lighted and ventilated by a round hole in the wall two feet in diameter; and that was the best they could do for us on a day when the thermometer was ranging somewhere between 90° and 100°. We are not much better off now, but we are one story nearer the foundation. The jam has its effect upon the servants also: it is almost impossible to get any of the little attentions that add so much to comfort, and for which the New York first class hotels used to be famous. You have to ring your bell two or threetimes to get an answer—cards that are left for you do not reach you, and if a friend calls to see you, unless he is possessed of more perseverance than usual, he is put off with the answer that you are not in. Such are some of the discomforts of a crowded hotel, that we believe proprietors would do well to remedy.

We accidentally met to-day Mr. Bond, formerly Secretary of the Cincinnati, Hamilton & Dayton R. R., and now President of the Allentown R. R., of Pennsylvania. This road is under active progress, and will be pushed to completion. Besides its merits as a link of a great *through line*, the shortest between New York and Cincinnati, it passes through a mineral region of great importance; coal and iron abound on its line, and many of its embankments are made of iron ore. If built at moderate cost, it cannot fail to be a profitable road. W.

CHICAGO, ST. PAUL & FOND DU LAC R. R.—This road is said to be well stocked and in excellent condition for business. Three passenger trains are running daily between Chicago and Beloit, Janesville, Madison and Prairie du Chien, and a large share of the travel for all points on the Mississippi river now takes this route. One daily freight train proves quite insufficient to accommodate the business, and a night freight train will be put on during the present week.

The construction of the unfinished portion of the road, and of its extension toward Lake Superior, is rapidly progressing. Work commenced some time since on that portion of the line which lies between Janesville and the La Crosse junction, and the road is to be

completed within the year. It is ready for the iron as far as Oshkosh, and soon will be extended to Appleton.

This is one of the roads that received a portion of the large land grants from Congress. The Directors have matured plans for its extension to Marquette and Ontonagon. It passes through as rich an iron and copper region as any in the world, which, in connection with lumber and agricultural products produced on its line, must ever furnish it a profitable business.

## Railroad Quereotypes.

No. LXXXIII.

### FLORIDA ATLANTIC & GULF CENTRAL R. R.

The report of this company is dated June 3d. The following are its officers:

President—J. P. SANDERSON, Jacksonville, Florida.

Treasurer and Secretary—G. C. GIBBS.

Superintendent and Engineer in Chief—J. L. GREGG.

#### DIRECTORS.

J. P. SANDERSON,  
A. S. BALDWIN,  
I. D. HART,  
A. M. REED,  
J. S. SAMMIS,  
T. E. BUCKMAN,  
J. G. DILL,  
P. MOODY,  
J. M. BAKER.

The ANNUAL MEETING of the stockholders is held June 2d.

#### DETAILS OF CONSTRUCTION.

Length of road.....60 miles.  
Termini.....Jacksonville, Fla., and Alligator, Fla.  
Gauge.....5 feet.  
Track.....Single.  
Sidings..... $\frac{1}{2}$  mile.  
Length of rail-bars.....18 feet.  
Weight per yard.....60 lbs.  
Kind of iron.....English.  
Kind of rail.....T.  
Ties.....Yellow Pine.  
Length.....8 feet.  
Size.....6 by 8 clear.

The Florida Atlantic & Gulf Central Railroad connects Jacksonville (a place of 3,500 inhabitants, on the St. John's river, 20 miles from the Ocean,) with Alligator, in Columbia county, 60 miles westward. At Alligator the road is to unite with that from Tallahassee, and from the latter place, which is the capital of the State, a road is now in successful operation to St. Mark, on the Gulf. The completion of the line unites by rail the Atlantic and Gulf. The entire grading is nearly completed and some iron has been laid from Tallahassee eastward. The balance is expected to arrive in about six weeks.

The roads traverse the best cotton and provision lands in the State, large bodies of which have been donated to the roads by both the Federal and State Governments.

John A. Gray, Esq., has resigned the Treasurership of the Michigan Southern Railroad.



## Railroads.

### CHICAGO, BURLINGTON, & QUINCY R. R.

The last Report of the Company whose name ours bears, was made in February, and that of the Central Military Tract Company in June, of last year. Since that time, these two Companies have, by the unanimous assent of the Stockholders of both, consolidated their stock, and become one corporation, under the laws of Illinois, by the name and style of the "Chicago, Burlington and Quincy Railroad Company." The wisdom of this consolidation has been fully vindicated by the success of the consolidated line, and will hereafter be more fully appreciated, from the power which it will give the Company to protect the business and prevent its being drawn off at any point, where, by possibility, its line, may be touched by other roads.

The business of the road for the past year has been very large, exceeding even the sanguine anticipations of those best acquainted with the resources of the country through which it runs, and which is tributary to it. This very large increase of business has unavoidably brought with it the necessity of increased expenditures, to keep the road in a condition to meet the requirements made upon it, both along the line and in its equipments; and also at Chicago, in the facilities for the transaction of its business at the terminus. The difficulty of obtaining a full supply of water upon the prairies, for the multiplied trains, has compelled us to sink many new wells, and erect many new water-houses. The impossibility of transacting both the large business of this, and the Galena and Chicago Union Railroad Company, upon the same grounds, at this point, has rendered it necessary to purchase lands here, in order to secure the transaction of our business in a satisfactory manner. Several Passenger Houses have been erected upon the line—once at Galesburg, being necessarily somewhat expensive in its character, that being the point of junction between your road and those of the Peoria and Oquawka, and the Quincy and Chicago (late Northern Cross) Railroad Companies. As has been stated in previous reports, some miles of the English compound rail proved to be of soft iron, and it has been deemed best to remove it from the main track, and make use of it for side tracks, where it may still be very serviceable and which the greatly increased business of the Company renders absolutely necessary.—The Company purchased a thousand tons of Iron to be used partly for this purpose, and partly for the station grounds purchased at Chicago. A large addition to the Rolling Stock, both cars and locomotives, has been made, and more is yet to be added to it. A great part of the road has been fenced in during the year. The expensive Machine and Repairing Shops, at Aurora,

have been completed, upon a scale commensurate with the increasing stock of the Company, liable to require repairs. All these things have necessarily added much to the construction account of the Company, during the period which has elapsed since the last reports were made. For particulars of these and other expenditures for construction, we refer you to the Report of the Treasurer, and the tabular statements connected therewith.

Fortunately for us, the Fort Wayne and Chicago Road was desirous, about a year since, of selling a portion of their grounds in this city, and this Company made a purchase of ten acres, at the precise point where it would best accommodate its business. It is not intersected by streets—fronts upon the river, and is accessible to lumber vessels. The amount paid for this and other lands subsequently purchased, appears in the Treasurer's report. It is believed that, aside from the necessity which compelled the purchase of them, these lands are now worth greatly more than their cost.

The item of expense mentioned in the Treasurer's Report, as the St. Charles Air Line, arises from the construction of a road about a half mile long, across the city, from the Depot, or station grounds so purchased, to the track of the Illinois Central Railroad, in which the Illinois Central, Michigan Central, and Chicago, Burlington and Quincy, and the Galena and Chicago Union Companies, all being interested, united to bear the expense. By the construction of this short piece of road, all these roads are brought into immediate connection, and the travel and business of the West and East are brought upon the same grounds, and into the same Depots—a matter of importance, not only to the companies, but to the public at large. To obtain the right of way, the parties were compelled to buy more land than was necessary for that purpose; and there will hereafter be some more money to be paid by this Company to complete the payments for its proportion of the cost of the track, to be diminished by amount for which the surplus lands may be sold.

The construction of this road has led to an arrangement with the Illinois Central R. R. Co., by which the freight and passenger business of this Company is done upon their grounds, except their Lumber trade, which is very large, and, requiring large space, is done upon our own grounds, recently purchased.

The original agreement with the Galena & Chicago Union Company, relative to the use of their track, and for Depot service and accommodations (published with the report, dated March 20, 1855,) has been modified by an agreement—a copy of which is hereto appended—by which a large sum is saved to the Company, annually. By the purchase of lands at Chicago, and by the transfer of depot

service accommodations to the Illinois Central Railroad grounds, the business of this Company is now transacted at Chicago, in a manner much more satisfactory than has been the case heretofore; and there will not hereafter be the same difficulties in transacting the business in Lumber, as formerly, and which was detrimental, to a considerable degree, to the business of the road.

The last report of the Chicago, Burlington and Quincy Railroad Company, before consolidation brought its affairs down to January 1, 1855. After that time, and before consolidation there had been expended upon it for construction and equipment, including lands purchased, the sum of \$296,380 90. The last Report of the Central Military Tract Railroad Company brought its affairs down to the 1st of May, 1856. After that time, and before consolidation, there had been expended upon it for construction and equipment, the sum of \$45,841 63. There has been expended for the same purposes upon the consolidated road \$949,445 48, being a total since the last reports of the sum of \$1,294,668 01 to May 1st of the present year. The expenditures are large, but it will be seen that they have all been necessary, adding mainly to the substantial property of the company; among them lands for stations and depot purposes, principally at Chicago; buildings, including Machine shops of stone, at Aurora; Engine houses at Galesburg, Aurora and Chicago; water houses, depots, &c., and freight cars, locomotives, track and side tracks, being the principal items.

The earnings of the line, since the dates of the last reports, or for the same period during which the expenditures have been stated, have been \$1,822,219,83. The operating expenses for the same period have been \$968,830,47. This period, however, includes the first four months of this year for the consolidated road, and the four first months of last year for the then Chicago, Burlington and Quincy Railroad. These months are by far the most expensive months in the year, being the time when the fuel for the year is purchased, and when other expenses are much larger than at any other season; and in these months of the present year, the extraordinary flood which was so disastrous to many western roads, occurred, sweeping away several of our bridges and suspending the business of the line, to a considerable extent, for upwards of a month, during which it was impassable for trains.

Of the bonds of the Company, convertible into stock, and bearing interest at the rate of eight per cent. per annum, the holders of \$519,000 have availed themselves of their right to exchange them for stock, thus diminishing the funded debt, and increasing the capital stock, by the same amount. That debt now stands at \$2,595,000 less the



amount deposited in the sinking fund, being \$54,000; and the capital stock at \$4,626,440.

The other debt of the Company, on the 1st of May, was \$898,055 83, running through this and a part of the next year, before maturity. It will be observed, however, by referring to the statement of the Ledger balances of the Treasurer, of that date, that there were cash on hand and cash items falling due before July the 9th, to balance one-half that amount, and that the other items of credit, including the amount of advances to the Peoria & Oquawka Railroad Company, are enough quite to balance the remainder. The amount advanced to that company is \$387,049 92, and is amply secured, but it does not fall due until March next. The other items of the credits may be made available, to a considerably extent, by that period.

In connection with this subject, the Directors will state, that the present funded debt of the Company is not in a condition to be satisfactory to the bond-holders, or to ensure for the bonds their real value in the market. They were issued when the company was not known by its present name, and the name found on them conveys no intelligence to a purchaser, of their value, or of the company which is liable for them. The stock of the company may be daily quoted, but there is no apparent connection between stock of a company known by one name, and bonds of a corporation under a different one. Under these circumstances, it would be well, probably, both for the company and the holders of its securities, to make a new mortgage, which should be sufficiently large to cover the whole funded debt of the company, and such further amount as the company may need, presently or in the future, conditioned to secure the same amount of seven per cent. bonds as are now outstanding, under the first mortgages of the Chicago & Aurora, and the Central Military Tract companies, viz., \$1,440,000, and the same amount of eight per cent bonds and of the same character, as are outstanding against the same companies, viz., \$1,155,000, being a total of \$2,595,000, less the \$54,000 deposited in the Sinking Fund, or in all, \$2,441,000 only, and such other bonds as might be issued under it, not to exceed the whole limited amount which may be deemed expedient, and with a sinking fund which should extinguish the debt, at the maturity of the bonds. This would be a small mortgage in comparison with the stock, and small as compared with the value of it, and would doubtless be soon diminished by further conversion of the convertible bonds. It would at once give a marketable value to the whole debt, and, beyond doubt, add to the value of every class of it to its present holders. There can be no reasonable doubt that they would much prefer to surrender the bonds now held by them in exchange for bonds

bearing the same interest and of the same kind under the same mortgage. It addition to the new mortgage it might and should perhaps, be provided that the bonds surrendered to the company in exchange should not be cancelled unless and until the entire amount of the outstanding bonds should be exchanged, but should be held either by the company, as a trustee or by the trustees of the new mortgage, for those holders under that mortgage, who should receive its bonds in exchange for them.—This would leave the first mortgage still a valid security until all the bonds should be exchanged, and for the benefit of the present holders of these securities. This would be just, and would leave the holders to exercise their option with safety to themselves and at the same time avail themselves of the new and more valuable security in the market, while their hold upon the prior mortgages would not be lost unless all holders should elect to make the exchange. In this latter case there would be but one mortgage and one set of bonds thought the rates of interest would be as now, and some of them would be convertible as now. It is not probable that any better security could be offered in the market than bonds secured by such a mortgage.

The directors take especial pleasure in announcing the success of their efforts to procure a locomotive adapted to burning the coal of Illinois. It is now some more than a year since they had a coal burning locomotive constructed at the Manchester Works; it has been in constant use for the whole year, doing service equal to that of any would locomotive on the line, and requiring as little care for repairs. This experiment proved to be so successful that all of the new engines, which have been placed upon the road, are constructed for the purpose of burning coal. Several engines, already upon the road, as they have required to be overhauled, have been changed into coal burners. The Company therefore has now running upon the road eleven engines of this description. The saving in the expense of fuel is probably some more than one-half, with the additional advantage, that when the whole stock of locomotives shall be of this description, the expenditure for fuel shall be more equally distributed through the year, instead of being made during those months when the business is least in amount, and expense necessarily the largest. As coal is abundant along the line of the road, and may, with increased facilities for working the mines, be produced with about one-half the present cost, the use of it successfully for fuel, which now seems beyond question, is a matter of great importance to the the future prosperity of the road.

There have been added to the rolling stock of the road, since the first of July last, eight locomotives, two second class passenger cars, and one hundred and fifty-one freight cars;

making the total stock now on the road as follows;

- 54 Locomotives.
- 26 First Class Passenger Cars.
- 5 Second Class Passenger Cars.
- 8 Baggage cars.
- 594 Freight House Cars.
- 116 Platform Cars.
- 50 Coal Cars.

Of the engines, eleven are adapted to the use of coal exclusively, as fuel, and, as above stated, thus far seem to be perfectly successful.

The past winter, on account of the flood, and the Spring from its extreme backwardness and cold weather, have much affected the business of the railroads of the West. The earnings of your road however, thus far equal, those of last year for the same period. The expenses, however, have been considerably larger, from the causes previously mentioned. Although these expenses, this year, have been the result of unusual causes, still, in each year, the expense of the first half of the year are much larger, in proportion to the earnings, than in the last and it may be expedient, for this reason, to change the day when the dividend shall be made, postponing that of the summer to the first of August or September, instead of the first of July, thus much more equally dividing the nett revenues of the year, and rendering the dividends, probably, much more acceptable to the stockholders, as well as much more convenient to company.

JAMES F. JOY, President.

#### FLORIDA ATLANTIC & GULF CENTRAL R. R. JACKSONVILLE, June 3d, 1857.

At a meeting of the stockholders of the Florida Atlantic & Gulf Central Railroad Co., held at their office this day, in pursuance of adjournment, 1,693 shares of stock were represented. Dr. A. S. Baldwin, President, read his report of the action of the Board and progress of this enterprise during the past year. A report was also read by J. L. Gregg, Esq., Engineer in Chief.

The Chairman appointed a Committee, consisting of Messrs. S. L. Niblack (proxy for Columbia county), T. Hartridge and S. N. Williams, to examine the books and accounts of the Secretary and Treasurer, and after such examination said Committee reported, viz:

"The Committee to whom was referred the examination of the books and accounts of the Secretary and Treasurer, report that we find them correct, and that we find in the Treasury:

Bonds.....	\$25,000 00
Cash.....	254 53
	\$25,254 53

And that the amount of cash liabilities is.....	8,500 00
	\$16,754 53

All of which is respectfully submitted."

It was then resolved that the meeting go



into an election for nine Directors to serve for the ensuing year, and, in counting the ballots, it was declared by the Chairman that the following gentlemen were duly elected, viz: A. S. Baldwin, I. D. Hart, A. M. Reed, J. S. Sammis, J. P. Sanderson, T. E. Buckman, J. G. Dell, P. Moody and J. M. Baker.

It was, on motion, *Resolved*, That the President (to be elected by the new Board of Directors) be requested to go, or send an Agent North or elsewhere to negotiate, as soon as possible, for the purchase of iron for this road, and also the necessary equipments.

Brief remarks were addressed to the meeting by A. S. Baldwin, S. N. Williams and S. L. Niblack, and at their conclusion this meeting of stockholders adjourned *sine die*.

I. D. HART, Chairman.

G. C. GIBBS, Secretary.

We make the following extracts from the President's Report:

"The report, estimates, &c., of the Chief Engineer are submitted for your inspection, from which you will be able to learn the progress and present state of the work. For the first ten miles from Jacksonville, the cost of graduation, cross-ties, trestles, culverts, &c., will be \$23,310 84, or an average per mile of \$2,331 08. For the second ten miles the amount will be \$26,380 71, or \$2,638 07 per mile; and for the third ten miles \$59,917 88, or \$5,991 78 per mile. The aggregate cost for the first thirty miles will be \$109,609 48, being an average of \$3,653 64 for this half of the distance, the most expensive part of the road, the heaviest part of the work being in Columbia county, from the Alachua Trail Ridge to some two miles beyond the South Prong of St. Mary's River.

The estimated cost of the last thirty miles to Alligator is \$79,068, or an average of \$2,635 60 per mile. The aggregate cost, then, for grading, clearing and grubbing, trestles and culverts, and for cross-ties for the whole distance, in readiness to receive the rail, is \$188,677 48, making an average of \$3,144 60 per mile. This is the actual cost of the work.

The Board found it expedient to make certain modifications of the terms of the original contract with Messrs. Patton, Bryson & Miller, by which these parties are to receive their pay exclusively in bonds, in lieu of the proportionably large amount of cash originally contracted to be paid. This arrangement has been effected on terms satisfactory to both parties, so that the construction of the road is now reduced to a certainty, which we regret to learn has with some been a matter of some doubt heretofore. Embarrassments in the prosecution of an enterprise like this must arise occasionally, and at such times the energies of its friends should be increased to surmount temporary obstacles, rather than allow doubts to paralyze their efforts and thus convert temporary into permanent difficulties.

A deed of trust has been executed to the Hon. W. A. Forward, of Florida, and to Jas. A. Patton, Esq., of North Carolina, as Trustees, on the alternate sections of State and General Government lands donated to this company, and upon these lands it is the purpose of the Board, to an amount not exceeding \$200,000, to issue bonds in the prosecution of the work.

For some time past the Board has been negotiating with parties at the North for the purchase of iron and rolling stock for the first thirty miles of the road, and although we are not able, as we expected to be, to announce to this meeting the completion of a contract, still we believe that this matter is in such favorable train that by the dispatch of an agent a satisfactory contract will be soon closed, so as to enable the company to have the first thirty miles of track laid by the first of January next, if not sooner.

On the whole, in consideration of the comparatively large amount of work on the first thirty miles and the expense already incurred, and from the fact that we are not in debt to our contractors, the Board feel warranted in congratulating the stockholders upon the favorable condition of the enterprise.

Our lands will soon come into market, and most of them are desirable on account of their location in proximity to our road, as well as on account of their intrinsic value for agricultural and other uses, and every mile of constructed road added is extending the basis of our credit, to enable us the more readily to purchase the iron and rolling stock; and we have now made such progress that the most incredulous should be satisfied that the enterprise cannot stop short of completion.

We are informed that the Pensacola & Georgia R. R. Co., whose road is but a continuation of ours, is also making good progress from Tallahassee eastward to meet us at Alligator—that some iron has already been purchased, and negotiations are on foot for more. The Chief Engineer of that company has recently returned from a reconnaissance toward Pensacola, the ultimate western terminus of the line. From the interest beginning to be manifested in the West toward the enterprise, we are encouraged with the hope that a separate organization will be effected among the citizens in that section most deeply interested in the extension of the line, to carry it forward simultaneously with its progress in the middle and East. The pressing forward of our part will encourage them, while their good example will infuse new life into our operations, and enable us to surmount all impediments which may temporarily hinder our common success.

The construction of the Florida Road from Fernandina to Cedar Keys is progressing rapidly southward into the Peninsula, from which section we may expect our road to de-

rive much benefit from its connection; by means of both roads, with the St. John's river or an established market at Jacksonville, and through which goods can be received at cheaper rates than at any other port in the South. When an entire system is completed, and the necessary connections with roads in adjoining States are made, it will be seen that our sixty miles of road hold a most important position in our own system, and also in regard to connections with similar enterprises of our neighbors."

We also make the following extracts from the report of the Chief Engineer:

"By the estimates herewith submitted of work done and materials delivered upon the eastern thirty miles of your road up to the 30th of May, 1857, it will be seen that the sum of \$71,758 93 has been expended, divided as follows:

1st 10 miles.....	\$22,185 89
2d 10 miles.....	16,572 21
3d 10 miles.....	32,700 83
	\$71,758 93

And thus classified:

Clearing and grubbing.....	\$ 4,514 99
Grading.....	54,397 62
Trestles and culverts.....	1,798 49
Cross-ties.....	10,669 50
Extra work, changing plank road.....	378 33
	\$71,758 93

The estimated sum to complete this thirty miles ready for the iron is \$37,850 55, making the full cost of this portion of the road \$109,609 48.

The exact point of meeting the Pensacola & Georgia Railroad at Alligator not having been fixed, thirty miles is assumed as the length of the Western Division. The estimated cost of this part is \$79,068, making the aggregate amount for clearing, grading, trestles, and culverts, and cross-ties, upon the sixty miles, exclusive of the branch to the river at Jacksonville (about one-fourth of a mile in length), \$188,677 48.

The lengths of trestle-work are thus: 40 feet at Fell's Swamp, 35 feet at Cedar Creek, 219 feet at McGirt's Creek, 204 feet at Big Cypress, 260 feet at Deep Creek, 1300 feet at the swamp easterly of Alachua Trail Ridge, 80 feet at Bay Branch and 1000 feet at the crossing of South Prong of St. Mary's River. That near the ridge, averaging about 15 feet in height, is temporary, the design being to fill the space from the ridge cut. That at South Prong averages 24 feet in height; the highest, at the stream, is 30 feet above the water. A portion of this will hereafter be banked from the cuts on either side. The trestle at Cedar Creek is about thirteen feet high. The others are in height from five and one-half to eight feet. Aside from these structures, the drainage of the road is done by well secured wooden culverts.

The excavation upon the line occurs mainly at these points: at the ridge going out from Jacksonville, the slope east of Fell's Swamp, that west of Cedar Creek, the slopes either



side of McGirt's Creek, at Alachua Trail Ridge, and the slopes either side from South Prong. The cut at Alachua ridge is ten and one-half feet in the deepest part and nearly one mile long. That east of South Prong is eight and one-half feet deep, that west of South Prong thirteen and one half feet, and the several others from three to five feet deep in their deepest parts. The influence of *moving sand*, at the two or three points where it might occur, will be effectually guarded against.

At these several points of excavation the natural slopes require high inclinations in the grade lines. There are about four and one-half miles—made up of several planes—of a gradient forty feet to the mile, and about one mile of a gradient thirty-one and seven-tenths feet to the mile. All others are very light.

In a working point of view, your road, as to curvature, is virtually a straight line.

At a meeting of the Board, J. P. Sander-son, Esq., was elected President, and G. C. Gibbs, Secretary and Treasurer for the ensuing year.

[From the London Mining Journal of June 20.]

#### COST OF POWER.

SIR:—In a recent *Journal* (June 6) you gave as a comparative statement of the cost of various kinds of power, the following numbers of units of work that could be done for 1s.: By man power, 600,000; horse power, 3,600,000; steam, 56,000,000; electro-magnetic, 900,000. The estimate of man's power is, I think, about correct, taking a laboring man's wages at 2s. a day. The horse power is certainly overrated; the best practical experiments on horse labor are those made at the tunnels on the South-Eastern line, and published in Simm's *Treatise on Tunneling*. There 133,055 tons were lifted a height of 104 feet at a cost of 1,585l. 15s. 3d., which will give 998,430 units of work only for a shilling. As, however, the cost of horse hire per day is not stated, it will be as well to give some more results. Horses working three hours per day gave, on an average of 112 experiments, 32,943 units of work per minute. Now, if the hire of a gin horse be taken at 5s. per day, and 1s. per day for a boy to drive, the above results will give for the number of units of work per day performed for 1s., horses working three hours per day, 988,290; and horses working six hours per day, 1,461,600 units. The work of a horse during eight hours per day may be taken at 20,000 units) (*i. e.*, lbs raised 1 foot high per minute); this, at 6s. per day, will give 1,600,000 units performed per 1s., a result not very different from the above.

On the other hand, the steam power is greatly underrated. Mr. Wicksteed gives, as the cost of pumping water, as follows: Single pumping engine (Bolton & Watt, 1809), 29½ horse power, ten and a half hours per day, six days per week, 265,000,000 units per shilling. Two single pumping engines (Bolton & Watt, 1809), 30½ horse power each, working constantly, 402,000,000 units per shilling. Two single pumping engines (Bolton & Watt, 1816 and 1828), twelve hours per day, seven days per week, 76 horse power each 432,000,000 units per shilling. Single pumping en-

gine (Harvey & Co., 1837), working constantly, 95 horse power, 960,000,000 units per shilling. It will be seen that the lowest result of the four gives an effect produced per shilling more than quadruple the statement I first referred to. The cost, as given by Mr. Wicksteed, includes everything, with coals at 12s. per ton; but, taking coals at 20s. per ton, the lowest of the four useful effects would be about 159,000,000 units, and the highest about 576,000,000 units of work done per shilling.

As of all applications of steam power that of Cornish engines to pumping is the most economical, it would undoubtedly be wrong to take such high averages as the mean useful effects that can be produced by a shilling's worth of steam power, nor is it possible to give a general average for a cost which must always be influenced not only by the price of coal and labor, but also by the particular nature of the object of the process. In the report of the gauge commissioners, the cost on the Great Western Railway of the goods train is stated at 0.06 of one penny per ton per mile; now, allowing for engine and tender, this would give about 9,500,000 units per shilling, provided the line was perfectly level; but, as this is far from the case, and as a gradient even as favorable as 1 in 280 would about double the resistance, and consequently the work performed, the real number of units per shilling must be twice or thrice as many; and, of all applications of steam power, a locomotive engine is, perhaps, the most costly. The small portable engines (high pressure) commonly used for farm and similar purposes, are stated to consume about 6 lbs. of coal per horse power per hour; taking one of ten horse power, working ten hours per day, and looked after by one man, this would give in round numbers 11,000,000 units per shilling.

With regard to the estimate of electro-magnetic power, 900,000 units per shilling, I am unable to speak; but, in turning to the discussion on Mr. Hunt's paper on the subject, at the Institution of Civil Engineers, fully reported in the *Engineer* of May 8, I find that gentleman, who is undoubtedly one of the highest authorities on the subject, states that electro-magnetism cannot (at present, at least,) be used as a motive power except at an enormous cost. Now, in the comparative estimate of power to which I referred in the commencement of this letter, and which I find was given in that discussion, manual power is stated at 600,000 units per shilling, whilst electro-magnetic is given, as I said before, at 900,000, showing a saving of 50 per cent. by electro-magnetic over men's labor, a result incompatible with Mr. Hunt's opinion.

Whilst on this subject, allow me to call attention to the subject of the registration of Cornish engines. Most people, I believe, agree that the introduction of this system, by Watt, has been one of the great causes of the economy introduced in working these engines; it is, therefore, surely important that the registration should be as perfect as possible. Now, the present mode of estimating the duty, and consequently the horse power, and the consumption of coal per horse power is, I believe, entirely by the amount of water raised and the height to which it is raised, the friction of the pumps, flat rods, bobs, &c., being entirely neglected. Hence the published duty does not accurately represent the number of units of work due to a certain consumption of coal; nor does it bear to it any certain ratio in different engines. It may be safely said

that no two pumping engines ever had the same amount of friction to overcome in performing the same amount of useful work. Moreover, as the amount of friction is not dependent of the engine itself, the published duty is not a fair estimate of the relative economical working of any two engines, and is unfair to the manufacturers. A self-acting indicator, showing the real amount of work performed, could be so easily fixed to each engine, that I wonder the makers, who are most interested in this matter, have not long ago adopted the plan.

A. H. PATTERSON, C. E.

LAUNCESTON, June 16.

ALLAN'S ELECTRO-MAGNETIC ENGINE.—We translate the following remarks respecting Mr. Allen's invention from the *Opinion* of Turin: "Another inventor of a new motive power by means of electricity has just appeared. This time there is no mistake, and Europe is indebted to Napoleon III. for having tested and made public a most important discovery, which will not altogether supersede steam, but will, under certain circumstances, replace it, or be economically employed in places where steam power cannot be used. A civil engineer, named Thomas Allen, a native of Edinburgh, had for years turned his attention to electricity, with a view to its application to machinery. His perseverance was rewarded, and the results of experiments made by him on a small scale satisfied him that he had solved the problem, that the principal on which he had constructed his machine was correct. Still the very importance of the discovery, coupled with numerous previous failures, made many persons sceptical. Fortunately, Mr. Allen applied to Mr. Forbes Campbell, who had become acquainted with Prince Louis Napoleon when he lived retired in England, and who had then been on many occasions useful to him. Mr. Forbes Campbell proceeded lately to Paris, and apprised his Majesty of the invention of his fellow countryman. Within forty-eight hours an Imperial Commission was appointed to examine and report on the invention. His Majesty placed at the head of the commission General Morin, a member of the Institute and Director of the "*Conservatoire des Arts et Metiers*," when the series of experiments were made. The results of these experiments surpassed expectation. The Commission recommended the French Government warmly and unanimously to make at its own expense trials on a large scale. On Monday, the 20th of April, his Majesty devoted upwards of an hour to the minute examination of the engine in all its details, and discussed with the inventor electricity in all its bearings and applications. In his youth, Napoleon III. studied mathematics and mechanics deeply, and few professors possess so thorough a knowledge of them as he does. No one, therefore is more competent to form an opinion for himself as to the value and importance of Mr. Allen's invention. The Emperor was delighted with the experiments, confirmed the report of the Commission, and congratulated Mr. Allen on having successfully solved the greatest problem of our time. It is said to be the Emperor's intention to purchase this invention, in order that the discovery may at once become public property in France, and be generally adopted. How fortunate the nation that has such a ruler! how fortunate the man of science who meets with such a patron!"



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r'st.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Ln'n of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon & Hamp'sr	.....	173	6,000,000.00	.....	209,475.46	110,216.98	none.
498,800	6			1862-3	2d	.....	Androscog'n & Kennebec	.....	54.55	1,400,000.00	.....	.....	.....	4 pr. ct. 6m
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	129,000.00	278,123.74	173,780.74	8 pr. ct.
52,646	6			now	"	.....	B'ng'r, Old T. & Milford...	.....	12.5	135,000.00	52,646.26	39,104.40	2,671.61	15,000 in '53
500,000	7		N. Y.	1860	"	.....	Boston & Worcester...	.....	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m
300,000	7			1865	1st mortgage.	.....	Buffalo & State Line...	.....	.....	1,300,000.00	.....	.....	.....	5 pr. ct. 6m.
200,000	7			1857-9-62	Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
				1864	Domestic.	.....	"	.....	.....	.....	.....	.....	.....	.....
577,187	6				4th mortgage.	.....	Central Ohio...	.....	30	.....	.....	.....	.....	.....
192,200	7			1872	1st mortgage.	.....	Champ'n & St. Lawrence	.....	43	1,872,800.00	1,001,087.00	168,200.00	77,760.00	10 per ct.
380,000	7			1874	2d	.....	"	.....	.....	.....	.....	.....	.....	.....
1,440,000	7				Domestic.	.....	Ch'r'l'te & South Carolina...	.....	110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
1,300,000	6-7-8		N. Y.	1864-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy...	.....	138	3,746,900.00	3,114,000.00	1,093,185.00	571,725.23	15 pr. ct. 6m
374,000	8			1868-9	2d	.....	"	.....	.....	.....	.....	.....	.....	.....
				1868-76	Convertible.	.....	"	.....	.....	.....	.....	.....	.....	.....
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa...	.....	5	1,761,149.16	2,241,500.00	221,491.96	.....	.....
532,000					2d	.....	Cin. Will'ng'n & Zanesville	.....	25	.....	.....	.....	.....	.....
104,000					3d	.....	"	.....	.....	.....	.....	.....	.....	.....
305,500					Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	.....	103 1/2	4,741,220	.....	1 3,754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning...	.....	85	1,500,000.00	.....	.....	.....	.....
400,000	7			1864	2d	.....	"	.....	.....	.....	.....	.....	.....	.....
0,000.00	6					.....	Cumberland Valley...	.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24
500,000	7			1873	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00	.....	.....	.....
				1857-8-9		.....	Eastern Railroad...	.....	93 6-10	3,345,900.00	.....	665,578.79	288,077.84	\$234,133
350,000	7				1st mortgage.	.....	East Ten. & Virginia...	.....	130	625,450.00	.....	30,897.30	19,692.30	.....
740,000	10			1869	1st	.....	Essex Railroad...	.....	20	700,000.00	.....	243,970.42	136,061.90	\$133,221.45
88,000	10			1861	2d	.....	Evansville & Crawf'd'vle	.....	109	2,228,657.00	.....	681,162.52	213,537.81	3 pr. cent.
400,000	10			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	33	3,540,000.00	.....	.....	.....	.....
200,000	6					.....	Fox River Valley...	.....	33	800,000.00	.....	50,321.33	14,822.45	\$166,240.00
100,000	6				1st mortgage.	.....	Fair Haven Branch...	.....	15	300,000.00	.....	1,068,262.59	357,689.42	\$166,240.00
100,000	6				1st	.....	Georgia RR & Banking Co	.....	233	4,156,000.00	.....	27,576.69	14,207.07	8 pr. ct.
300,000	6			1858	1st	.....	G't West'n R.R. of Can.	.....	281 1/2	4,191,550.00	.....	339,196.50	176,529.98	.....
4,000,000	6 1-9			1869-70	1st	.....	Housatonic Railroad...	.....	74	2,000,000.00	.....	1,924,232.44	718,037.40	.....
2,000,000	7			1860	2d	.....	Hudson River...	.....	21	4,000,000.00	.....	.....	.....	.....
1,812,000	7			1875	3d mortgage.	.....	"	.....	144	4,000,000.00	.....	.....	.....	.....
12,885,000	7			1876	1st	.....	"	.....	144	4,000,000.00	.....	.....	.....	.....
4,115,000	6			1876	1st	.....	Illinois Central R.R.	.....	124	18,453,376.00	.....	1,476,035.27	1031,489.08	7 pr. ct.
3,000,000	7			1860	Freeland.	.....	"	.....	704	3,558,376.00	.....	.....	.....	3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.	.....	Indiana Central...	.....	48	72 4-	.....	351,871.00	.....	.....
700,000	7	Jan. & July 1		1862	2d	.....	Iron R.R.	.....	13	123,700.00	.....	.....	.....	.....
50,000	7				1st mortgage.	.....	Kentucky Cen. 2d Div.	.....	.....	719,500.00	.....	.....	.....	.....
700,000	7					.....	Knoxville & Kentucky...	.....	.....	.....	.....	.....	.....	.....
						.....	Laurens (S. C.) R.R.	.....	32	166,000.00	.....	23,233.59	14,233.59	.....
218,000	7				1st	.....	Louisville & Nashville...	.....	184	.....	.....	50,234.71	14,149.13	\$7,000
1,000,000	7			1866	2d	.....	Lowell & Lawrence	.....	12 35-	300,000.00	.....	587,236.57	.....	10 pr. ct.
1,000,000	7			1875	3d	.....	Mad River & Lake Erie...	.....	.....	2,697,090.00	.....	.....	162,277.50	.....
2,000,000	6				1st	.....	"	.....	.....	2,697,090.00	.....	.....	.....	.....
2,500,000	7			1868	1st	.....	Manchester & Lawrence.	.....	26	1,000,000.00	.....	.....	.....	\$24,000
2,000,000	7			1874	2d	.....	Marietta & Cincinnati...	.....	19 1/2	.....	.....	.....	.....	.....
60,000	7 and 8			1867	1st	.....	"	.....	.....	.....	.....	.....	.....	.....
420,000	8				1st mortgage.	.....	Mexican Gulf R.R.	.....	27	.....	.....	253,498.96	162,802.24	7 pr. ct.
320,000	8			1881	1st	.....	Milwaukee & Horicon...	.....	30	600,000.00	.....	194,752.42	55,501.74	7 pr. ct.
320,000	8			1868	2d	.....	Mineral Point R.R.	.....	32	922,500.00	.....	7,707,348	3,609,451	2 pr. ct. 6m
6,000,000	6			1884	1st	.....	"	.....	32	2,697,090.00	.....	.....	.....	3 pr. ct. 6m
500,000	7			1869	1st mortgage.	.....	Mobile & Ohio...	.....	497	10,000,000.00	.....	.....	.....	.....
2,356,000	7	May & Nov.	N. York		1st mortgage.	.....	Nashua & Lowell R.R.	.....	15	600,000.00	.....	.....	.....	.....
8,892,600	6	June & Dec.	N. York	1864	Con. till 1859.	.....	New Haven & North'm'tn	.....	55	922,500.00	.....	.....	.....	.....
936,000	7			1873	1st mortgage.	.....	New York Central...	.....	80 1/2	23,067,400	14,763,807	7,707,348	3,609,451	3 pr. ct. 6m
111,700	6			1864	2d	.....	N. Y. & Harlem R.R.	.....	10 1/2	6,717,100.00	.....	1,040,393.26	64,678.71	\$37,692.30
500,000	7			1863	1st	.....	" Pref.	.....	25	.....	.....	.....	.....	.....
300,000	6				1st	.....	N. Y. Prov. & Boston...	.....	50	1,58,000.00	.....	245,713.00	51,544.40	.....
					2d	.....	N. Lon., Will'm'tu & Pal.	.....	66	1,700,000.00	.....	120,571.50	.....	.....
1,500,000	6			1873	1st mortgage.	.....	Pontchartrain R.R.	.....	5	500,000.00	.....	.....	.....	.....
1,000,000	6			1873	2d	.....	N. O. Opelosa & Gr. West.	.....	62 1/2	6,00,000.00	.....	116,795.00	366,118.60	7 pr. ct.
2,000,000	7			1855	3d	.....	N. Y. & New Haven...	.....	103 1/2	3,000,000.00	.....	1,007,666.48	.....	.....
1,500,000	7			1859	1st mortgage.	.....	North Western Va. R.R.	.....	.....	.....	.....	.....	.....	.....
3,000,000	5			1877	1st mog.	.....	Norfolk & Worcester RR	.....	60	2,111,500.00	.....	600,000.00	25,176.74	22 1/2 pr. ct.
419,300	6			1860		.....	"	.....	.....	.....	.....	304,236.33	.....	.....
221,800						.....	Ogd'n'sb'r, Clayton & Rome	.....	94	.....	.....	259,690.10	137,875.93	5 pr. ct.
400,000	6			1866	1st mortgage.	.....	Ontario, Simcoe & Huron	.....	88 3-	2,957,500.00	.....	276,539.02	.....	.....
1,200,000	8			1875	2d mortgage.	.....	Orange & Alexandria R.R.	.....	47	1,500,000.00	.....	.....	.....	6 pr. ct.
300,000	7			1861	1st mortgage.	.....	Peoria & Bureau Val. R.R.	.....	28 1-5	1,000,000.00	.....	.....	.....	.....
300,000	7			1861	1st	.....	Philadelphia & Trenton...	.....	47	.....	.....	.....	.....	.....
1,260,000	0			1864 to 1874	1st mortgage.	.....	Potsdam & Watertown...	.....	76	2,000,000.00	.....	68,525.42	.....	.....
				20 years.	1st mortgage.	.....	Rutland & Washington...	.....	62 1/2	950,000.00	.....	.....	.....	.....
500,000	6			1861	1st mortgage.	.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00	.....	.....	.....	.....
250,000	6			1861	2d	.....	Salem & St. Louis R.R.	.....	168 3/4	400,000.00	.....	.....	19,050.64	.....
317,000	6			1875	1st mortgage.	.....	Snd'sky, Mansf'd & Newk	.....	116	.....	.....	75,246.06	17,378.08	11m. 1 pr. ct
300,000	7			1861	1st mortgage.	.....	Sullivan Railroad...	.....	26	500,000.00	.....	.....	.....	.....
198,000	7			1840	2d	.....	Tennessee & Alabama...	.....	145	.....	.....	39,586.44	.....	.....
262,500	7			1875	3d	.....	Terre Haute & Richmond	.....	73	1,294,450.00	.....	.....	.....	.....
2,500,000					1st, 2d, 3d	.....	Toledo, Wabash & Western	.....	242	1,000,000.00	.....	.....	165,076.04	2 pr. ct.
596,000	7				1st mortgage.	.....	Troy & Boston...	.....	.....	.....	.....	.....	.....	.....
200,000	7				2d	.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Vicksburg & Jackson...	.....	46	.....	.....	.....	.....	.....
						.....	Virginia & Tennessee...	.....	215	3,000,000.00	.....	322,048.60	.....	.....
						.....	Westchester (Pa.) R.R.	.....	31	165,000.00	.....	.....	.....	.....
						.....	Wilmington & Manchester	.....	171	.....	.....	.....	.....	.....
						.....	Winchester & Potomac...	.....	32	.....	.....	.....	.....	.....
						.....	Worcester & Nashua...	.....	45 69.	.....	.....	.....	.....	.....







## LITTLE SCHUYLKILL R. R. &amp; NAVIGATION CO.

The Annual Report of the Managers of this company is as follows :

Notwithstanding the discouragements to coal production, by prevalent low prices and dull markets during the past year, the amount of coal conveyed over the company's road exceeds that of the previous year 28,307 tons. The production from the company's lands is for the year 379,538 tons, an increase of 38,461 tons, whilst that passed over the road from other mines is 10,154 tons less than that of last year, making an aggregate of coal transportation 454,514 tons. The receipts from miscellaneous freight and passengers is \$60,600 82, being an increase from that source of \$11,912 38. With this statement of coal production and transportation, larger dividends, or at least the equivalent of those of past years, could reasonably be expected. Such, however, has not been the result; and a sufficient cause for it is found in the fact that the provisions of the leases (made more than five years since, and which expired on the 31st ult.,) apparently promised a large rental per ton on coal mined, whilst the net receipt was dependent on the amount of deductions made for cost of labor, directed and applied by the Lessees, over which the Board had little or no power; and which, with expenditures imposed as obligations on the company by its own action in past years, left the clear rental in reality greatly reduced. When the extent and character of these difficulties were fully discovered, all that could be done was to restrain within the limits of the obligations of the leases, and the prior decisions of the company, the amount of allowances claimed; and, having done this, not to hesitate to meet the consequences (in reduced dividends) of a distribution to the stockholders of only the real clear profits of the business.

The Managers have conducted to final completion the erection of outside machinery at two important collieries on the company's property, which were in process of construction at the date of last annual report; they are now prepared for full operation, and have also built a number of houses near one of these collieries for miners' residences. The expenditures on these accounts are represented by values, which will doubtless return a revenue highly productive in proportion to the outlay.

The efficiency and usefulness of the machine shop has been farther extended, and its operations productive of satisfactory results. Besides supplying the means of speedy and economical repair to the locomotive and other machinery in use, it has been a source of profit to the company, and will be an important aid in reducing the cost of working and maintaining in good repair our rolling stock.

With the design of supplying the company with ample means to protect its property from exposure and injury, the construction of an engine house to accommodate twenty first class engines has been commenced. Although this amount of motive power is greater than the present necessities of the transportation department require, a proper foresight of its future wants forbade any less provision. This work was prosecuted until interrupted by frosts. On the return of suitable weather it will be resumed.

The railroad has been partially relaid and much improved and road bed for a second track prepared, as it could be done with least

cost. The road is now in the most satisfactory condition.

During the year the mortgage debt has been reduced by the purchase and application to the Sinking Fund of \$19,000 of the bonds of the company, leaving the amount of bonded debt remaining at this time, \$419,500.

The increase of receipts from business conducted to our road by its connection with that of the Catawissa Railroad Company is not so large as was anticipated; but the means which have been and are now applied by the energetic and capable direction of that company, cannot fail to insure annually increasing business, and, consequently, augmented profits from that source.

The Managers became aware that titles to certain tracts of coal lands adjoining our property on the west were not vested in this company, and that their locality rendered it of much importance that they be acquired and incorporated with its other lands; otherwise the coal rent from the product of the nearest colliery thereto might be diverted from the company's treasury, and the penetration of these lands by underground workings from our side result in embarrassment and loss of expected revenues. At the time of this discovery the company was not in a position to acquire by purchase the lands referred to; means were, however, adopted to secure that privilege, at a price fixed, being less than \$100,000 for about 800 acres of coal lands, together with sundry separated tracts, which were necessarily connected with the transaction, containing about 4,000 acres (not in the coal basin), making, in the whole, about 4,800 acres.

When the period for the action of the Board arrived, not a doubt existed as to the duty devolving on the Managers in this matter, and by an unanimous vote it was resolved that an agreement to purchase on the terms stated be made, under arrangements for delayed payments, and that sales be made of such portions of said lands as will not be required for the company's use, together with other lands not now or hereafter required for the purposes of the company's business. This, when effected, will offset the cost and charge to the landed property, and protect the revenues from loss by the cause referred to.

A partial accomplishment of this design has already been effected by a sale, for the sum of about \$28,000, of a small detached piece of land (not now, or promising to be in the future, without such disposition of it, productive to the company,) to parties owning an adjacent tract, with the condition that the purchasers shall, at their own cost, erect mining machinery, and that the coal products of their property shall be conveyed on the company's railroad to Port Clinton. It is the intention of these parties to construct a first class colliery, which, in operation, will contribute largely to our coal transportation.

All the leases under which the mining tenants of the company used its lands and machinery, expired by limitation on the 31st ult. The subject of the renewal of the old, or the negotiation of the new leases, pressed strongly on the attention of the Managers. The importance of a proper disposition of this great interest commended it to the most earnest and solicitous care of the Board. Negotiations were entered into with the former lessees, experienced and efficient coal miners and operators, which, after much discussion and delay, resulted in agreements to lease for five years from the 1st inst., on terms satisfactory

to the Managers, and, in comparison with the former leases, highly advantageous to the company, and at the same time liberal in their provisions to the lessees, and adapted to encourage much increased coal production and transportation.

The principles of these leases, establishing and stating explicitly the relations and obligations of the respective parties, are, in all essential and important features, different from those which have just expired.

Under the late lessees, the nominal amount of coal rents was subject to such deductions for labor done in the mines, with charges proper to that account for other expenditures, that until the allowances claimed for dead work, driving faults, &c., were adjusted, it was impossible, with any safety, to do more than conjecture what the real revenue from coal rents would be.

This condition of affairs has happily ceased to exist; the present leases, now in force, are precise and certain in defining the relations of the parties to each other, and impose no liability whatever on the company in regard to working the mines or maintaining the machinery, and affects its revenues only as the greater or less production and transportation will control it.

The qualifications of the lessees in skill and experience, and possession of ample means to conduct their business successfully, under leases sufficiently encouraging to stimulate the largest production, warrants the belief that the coal tonnage will be annually increased, and as certainly productive of relatively augmented income.

The Managers congratulate the stockholders on the termination of the leases which have just expired (and with this the removal of the causes which, above all others of the company's interests, have produced the most perplexing cares and anxieties) and the creation of its present relations of business.— They express their reliance on the sufficiency of the actual net income to insure satisfactory dividend returns, and believe that the doubts and uncertainties in which the great interests of this company were placed have passed; that its value in coal property, its advantageous locality and favorably graded railroad, with present and probable connections therewith, promises an annually increasing productive power that will not disappoint the confidence it claims.

Transportation and income account for the year ending Dec. 13, 1856 :

RECEIPTS.	
Railroad tolls—Tolls on coal.....	\$128,070 42
Transporting coal.....	106,122 60
Coal leave on coal mined from company's lands.....	52,544 22
Freight and tolls on all other articles than coal.....	42,786 03
Receipts from passengers, express and mail.....	17,804 79
Rents of houses and hotel.....	4,569 89
Lands—for timber, &c.....	2,704 63
	\$354,612 48
EXPENSES.	
Wages and expenses on trains.....	\$23,697 63
Wood and expenses.....	11,744 81
Coal.....	7,464 13
Oil, grease and tallow.....	4,437 74
Railroad repairs.....	44,268 05
Locomotive repairs.....	16,441 66
Freight cars, do.....	1,943 71
Salaries and office expenses in Schuylkill county.....	8,551 40
Salaries and office expenses in Philadelphia.....	6,504 90
Contingent expenses, insurance, &c.....	2,276 73
Taxes on lands.....	5,215 51
Team expenses.....	2,740 51
	137,386 7
	\$217,225 70



## Profit and loss account, Dec. 13, 1856 :

Cr.

Balance January 1, 1856.....	\$108,323 55
Profits for 1856.....	217,225 70
	\$325,549 25

Dr

Interest on mortgage loans....	\$ 30,000 00
Sundry interests.....	4,533 15
State tax on dividends.....	12,760 40
Coal lost on road.....	1,183 95
Sinking Fund.....	10,000 00
Dividend, January, 1856.....	104,244 00
“ July, 1856.....	52,122 00
	214,843 50

Balance to credit of account.....\$110,705 75

THE PLANET SATURN.—Every improvement of the telescope brings to light some new feature in the appearance of Saturn. During the last three or four years, when the planet has been favorably situated, with the ring fully opened, the attention of astronomers, possessing powerful telescopes, has been directed to an appearance on the outer bright ring, which was asserted to be another division—thus forming three separate bright rings. Others though possessing large instruments, not only questioned the division of the outer ring, but doubted the existence of any mark whatever. During this time several very fine lithographic prints of Saturn have been published by the respective observers—some with and others without the controverted division. Among those showing a black division were two very excellent ones—by Captain Jacob, of the East India Company's Madras observatory, and Mr. De la Rue, of London. In the early part of last year, while the matter stood thus, a paper by Mr. John Watson, of Washington Chemical works, was read before the Royal Astronomical Society, in which the author reported having several times, with his large telescope, not only seen the mark in question, but that he was able to speak positively as to its real nature, viz. that it is not a division, but a mere belt or streak, similar in appearance to the belt which so conspicuously cover the balls of Jupiter and Saturn. Yet, Mr. Watson's evidence was to be weighed against a bulky mass on the other side, and was hardly considered conclusive. Captain Jacob now writes from Madras, that, with the large telescope of that observatory, and in a fine atmosphere, “He can fully confirm the opinion expressed by Mr. Watson as to the nature of the mark on the outer ring, viz. that it is not a division, but a mark or Streak. It is not at all difficult to see here; indeed I cannot (he continued) look at Saturn, when the atmosphere is at all fit for observing. without seeing it. But further, it is my opinion that the principal division, so called, is of the same nature, viz. a belt or mark, and not a clear space or division; for I not only see it of a brown hue, but can distinctly make out the shadow of the planet across it.” This is startling information for astronomers.—*North-ern Daily Express*.

A RAILROAD DECISION.—A passenger got on the Illinois Central Railroad at Jonesboro', and, after riding a mile and a half, the conductor demanded the fare. Passenger offered a \$100 bill, the fare being \$1 55. The conductor could not change the bill, and told the passenger he must get out. The passenger did so, and sued the company for damages. The court decided in favor of the company, holding—

1. That the conductor was not bound to change the plaintiff's bill, although it may have been genuine.

2. That the offer of the bill, demanding a return of \$93 45, was not a tender of the fare, nor offer to pay it.

3. That upon the demand of the fare and the refusal of the plaintiff to pay it, the conductor had the right to expel the plaintiff from the cars, using no more force than was necessary for that purpose.

4. That when a person goes aboard of a passenger car without having paid his fare in advance, and the same is demanded by the conductor of the train, and a refusal to pay it when so demanded, the conductor is not bound to take him to the next station, but may expel him at once, unless by such expulsion the life or health of such persons would be thereby endangered.

## PROF. SALOMON'S NEW MACHINE.

Professor Salomon claims that we are mistaken in the principle of his new *Liquid Motor*, and thus mistaken in our premises. As we have no desire to misrepresent Mr. Salomon—but every wish for his success—we make the following extract, explanatory of his new invention.

“Carbonic acid gas has been experimented with as a motive power in every variety of form, but the great difficulty of condensing it and of producing vessels sufficiently close in their texture to contain it without waste, though possessing great power itself, is nevertheless impracticable for the purpose, if used alone. The bi. sulphuret of carbon has also been used for the like purpose, and is found to be a powerful agent, but after a short time it roughens the metal so as to produce too much friction in the working parts.”

“The object of my invention is to produce a liquid compound that will facilitate the condensation of the carbonic acid gas, render the vessels in which it is contained impervious to it, and at the same time act as a lubricator to all parts it comes in contact with, &c.

“Having thus described my invention, what I claim as new, and desire to secure by letters patent, is the sulph-oil carbonic acid liquid, prepared in the manner substantially as described, and used in combination with carbonic acid, generated in any known way, or other equivalent LIQUEFIABLE GAS as a motive power.”

Here, then, our friend of the Cincinnati Railroad Record will perceive that he argued from false premises, assuming that which did not exist, and which Prof. Salomon does not claim. This being so, the editor's deductions regarding the impracticability of the new fluid, or combined liquid motor, noticed by us, are equally untenable.

“Low expansion can be produced by any gas, but always at a cost greater than they are worth.” This expression shows that the gentleman has never experimented with high expansion of GASEOUS LIQUIDS.

“From a comparison which has been instituted as to the cost of different means of producing power, it appears that for every shilling expended, there may be raised by  
Manual Power.... 600,000 pounds, 1 foot high per day.  
Horse “ 3,600,000 “ “ “  
Steam “ 56,000,000 “ “ “  
Electro Mag 900,000 “ “ “

But by the new gaseous liquid (of Salomon) the ratio is 212,000,000 pounds 1 foot high per day, and yet by a saving of 80 per cent. of fuel.

It is not for us to speak of Prof. Salomon's new motor beyond what we have seen clearly demonstrated on several occasions, or outside the favorable records of practical and scientific gentlemen. The operations of the machine were satisfactory, indicating a wonderful triumph in this new element of force. Our hope is

that it may be so developed, and that speedily, as to silence all doubt. Its apparent power, wonderful economy, and beyond all, entire safety over steam, are considerations not only claiming, but absolutely demanding, at almost any cost, a thorough testing and more extensive development of this new motor.

If even a motive power can be produced, in all respects only equal to steam, with regard to economy and momentum, and entirely free from the danger of explosion, it has infinitely the advantage, and must come into general use.

We learn that this motor will be put into operation again about the middle of the present week, when special invitations will be extended to those desirous of witnessing its performances.

NEW YORK CENTRAL.—The following is a statement of the earnings of the New York Central Railroad, for the month of June, 1857, compared with its earnings for the corresponding month of the preceding year:

June, 1857.....	\$373,370	June, 1856.....	\$651,870
Decrease.....			\$278,500
NEW YORK CENTRAL—NINE MONTHS' RAILROAD YEAR.			
	1856-7.		1855-6
October.....	\$913,560		\$736,422
November.....	745,411		674,941
December.....	695,432		608,802
January.....	462,262		461,807
February.....	460,897		378,884
March.....	674,362		519,811
April.....	746,046		707,863
May.....	662,488		696,912
June.....	573,370		651,870
Total, nine months.....	\$5,933,534		\$5,493,613
Increase this year.....			\$440,221

The full railway year promises a gross earning of over eight millions dollars, and there is little question that the net result to the stock on the official report to be made to the State Engineer on the 30th September, will be full eleven per cent. on the capital of \$24,000,000, or \$720,000 over the regular 8 per cent. division to the stockholders. The surplus balance to the credit of the income of the Road at the close of last year, on the working of three years since consolidation, was \$1,301,036. The surplus from the current year being added, the income balance to be carried forward, will be over two millions of dollars. In other words, the property will have earned net, in four years, over 40 per cent., of which 32 per cent. will have been divided to the stockholders.—*N. Y. Times*.

MARYLAND COAL TRADE.—The Cumberland Civilian states the coal shipments of the week to be from the Frostburg region 7,768 tons; from the Westernport region 8,396 tons; total for the week 16,731 tons, and for the year 302,976 tons. For the same time last year the shipments amounted to 310,318 tons, being a decrease this year of 7,342 tons.

SCIENCE IN FRANCE.—We learn from Messrs. Armengaud's valuable publication, *Le Genie Industriel*, that a society for aiding scientific persons of humble means, has just been founded in Paris, intitled “*Societe de Secours des Amis des Sciences*,” under the auspices of M. Le Baron Thenard. This Society held its first sitting on the 5th of March last, when articles and Statutes for its regulation were voted. The annual subscription is to be but 10 francs, and aid is to be offered to all persons (belonging to France) who need and merit it, whether members or not; and also to their families, in the event of their decease. The chief test of merit is the production of a memoir or work approved of by the Academy of Sciences.

Gilbert L. Wilson has been appointed Treasurer of the New York Central, in place of John V. L. Pruyn, resigned.



## FOX RIVER VALLEY R. R.

From the report of this company we learn that "the line of this road is located in a south-west direction from the city of Milwaukee, running through the villages of Watersford and Rochester, and at Burlington connects with the Racine & Mississippi Road, by a connection with which road the points of Elkhorn, Delevan, Beloit, Freeport, Savanna, and a large portion of Central Iowa, will be put in direct communication with the city of Milwaukee."

The subscriptions to the capital stock, individual and corporate, amount to \$205,700, on which subscriptions payments have been received in cash, farm mortgages perfected, and 8 per cent. bonds of the towns of Burlington and Rochester, in all \$103,960 92. The resources of the company in bonds, mortgages, installments due and falling due this year and 1858, are \$539,339 08, to which add what has already been expended, and there is a total of \$571,644 73. The cost of completing the road is estimated at about \$16,750 per mile, including right of way, grading, bridging, superstructure, &c., or \$527,625 for the whole distance.

When completed, this road will open to the grain market of Wisconsin the whole of Northern Illinois, Central and Southern Iowa; and, in return, the whole of that rich and populous region of country will receive their merchandise, lumber and other commodities from and through the lake ports of Wisconsin.

THE CHICAGO & BURLINGTON R. R.—The earnings of the Chicago and Burlington Railroad Line for June, 1857, were:

	Freight.	Pass.	Miscel.	Total.
June, 1857..	\$173,419.15	\$59,577.33	\$2,752.63	\$235,749.11
June, 1856..	109,966.59	53,096.29	1,515.36	164,578.24

Gain in 1857 \$63,452.56 \$6,481.04 \$1,237.27 \$71,170.87

The proportion of earnings for each road comprising the line are as follows:

	Freight.	Pass.	Miscel.	Total.
C. B. & Q. R. R.	\$142,265.12	\$46,162.33	\$2,383.14	\$190,711.59
G. & C. U. R. R.				
C. & O. R. R.	23,191.64	5,018.37	59.37	29,269.38
Peo. & Oq'wka..	6,961.39	8,396.63	410.12	15,768.14

Total..... \$173,419.15 \$59,577.33 \$2,752.63 \$235,749.11

In addition the above, the earnings of the Quincy and Chicago (late Northern Cross) Railroad for June, are as follows:

For freight....	\$23,607.85	For miscellaneous.	\$67.67
For passengers 14,054.10			
For mail.....	\$33.32	Total.....	\$38,887.95
For express....	325.00	Earn'gs, June, '56.	25,465.67

Gain in 1857.....\$13,492.28

OHIO CENTRAL ROAD.—Comparative statement of gross earnings of the Central Railroad Company:

	1855.	1856.
August.....	\$31,862 94	\$65,686 17
September.....	33,731 24	75,701 48
October.....	42,821 22	81,515 46
November.....	37,116 90	71,325 63
December.....	38,201 13	63,077 66
1856.		1857.
January.....	30,268 34	50,417 46
February.....	32,549 51	44,773 64
March.....	45,608 73	53,447 63
April.....	47,422 73	54,094 31
May.....	45,163 43	45,885 91

Total for 10 months..\$390,430 22 \$611,903 20

Increase of last 10 months.....\$220,475 02

The average receipts from August 1, 1856, to May 31 1857, inclusive, are over \$61,000 per month, and the revenues for that period, in comparison with the same ten months of the preceding year, have increased \$220,475 02, or upwards of 50 per cent.

## FERNANDINA AND CEDAR KEYS RAILROAD.

Relative to this road we learn from the Charleston Standard that the whole of the iron except that necessary for about twenty-five miles, has been purchased, or is landed or is on the way. Beside this there are 1,200 tons which was brought out by the ship *Parliament*, and landed at Savannah. The company refuse to receive it at that point, and is therefore the subject of litigation.

Forty-five miles of the road has been completed, and is in daily operation. The whole length of the road is 140, of which more than half is graded. The grading force amounts to about 300 men, and they can keep in advance of the track-laying; the track-laying advances about two miles per week, and by the fall, a commencement will be made to lay at Cedar Keys, so as to turn the candle at both ends.

There is one working engine on the road, and another, the Gov. Broome, with passenger and freight cars, is to be at Fernandina before the end of the present month. Even from the point to which the road is now completed, it will draw the cotton from Columbia and Madison counties, and by November, it will draw from Alachua and Marion together with all the other products of that region.

Such is the state of progress in this enterprise, and there is every assurance, that for the crop after the one that is now being prepared for market, it will be completed and in the full tide of operation.

The endowment of this institution is most munificent. It owns, or will own, when completed, one million acres of land, besides the town sites of Fernandina and Cedar Keys, and to show the importance of these latter items of property, lots to the value of \$95,000 have been sold at Fernandina. The lands have been located, but they have not been brought into market, the funds of the company having so far been sufficient. The land sales will be opened soon, however, when a considerable addition may be expected to the population of that section.

This work when completed will not only form the highway between the Gulf and the Atlantic, but will stand an enduring monument to the enterprise of these gentlemen who have so steadily and so laboriously devoted themselves to its erection.

WABASH VALLEY RAILROAD.—The earnings of the Wabash Valley Railroad in June were \$62,067; expenses, \$37,957; net earnings, \$24,110 of the above expenses, \$8,000 were applied to construction account. This company being embarrassed by its floating debt, it was proposed at a recent meeting of the Board and Stockholders that two coupons on the 1st and three on the 2d mortgage, should be funded. The earnings of the road could then be devoted to the payment of the floating debt, a portion, however, being reserved as an accumulating fund for the redemption of the funded coupons. A committee was appointed to examine the affairs of the company and report if it is advisable to accede to the proposed plan.

The Michigan Southern & Northern Indiana Railroad Company have determined to call the \$1,500,000 bonds that they are about to issue "8 per cent. bonds," instead of "income bonds," the title by which they were designated in the resolution directing their issue. The motive for this change has not yet transpired. A question as to the power of the company, under its charter, to issue these bonds, has been raised, upon the ground, we believe, that their power to make such loans ceased with the completion of the road.

The receipts on the Lehigh Valley Railroad for the month of June, 1857, were.....\$48,258 42  
Same month last year.....21,334 05  
Increase.....\$26,924 37

MILWAUKEE & HORICON R. R.—Thirty new box cars have arrived for this road. The iron rail, chairs and spikes sufficient to build the road to Berlin are on the way and daily expected. The road is nearly graded, and the work of laying the rail will commence and be completed next month. We expect to ride to Berlin by the 1st of August on a rail. —Free Dem;

## ALLEN & NOYES'

### METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by  
VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.  
feb19-1m

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

## SILVER, GOLD, LEAD,

### And Other Minerals,

### ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residu is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cincinnati, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27¼ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, and Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio.

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI

AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus. One train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:30, 4 and 6:20 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities. Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M., INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M., MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburg, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via. Clyde, through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:20 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:20 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8 A. M. and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 8:15 and 10:25 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdo, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Fr'ght. Ag't.

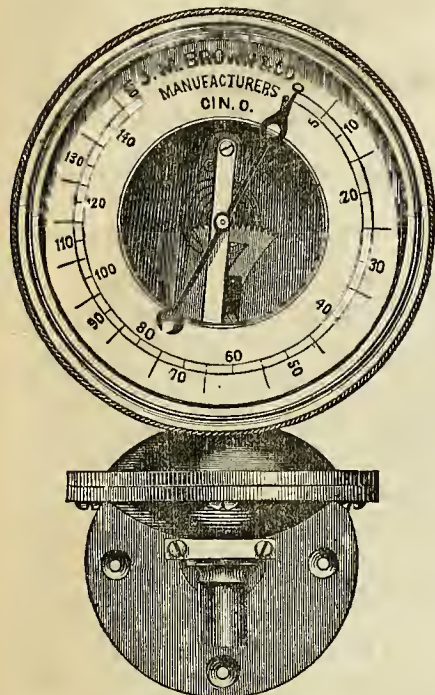
Indianapolis, Sept. 16, 1856.

[mh29-1y.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to

### DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmiths' Ties.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
62 PLATT STREET, New York.



## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy. 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,  
From ¼ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA. Aug

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GOODMAN & CO.,  
no. 7 Wall st., N.  
Feb. 7. '56-2m.]

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS & NIXON

No. 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush-

Printed & Unent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width.

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRASS FILLING

N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON

## W. G. ATKINSON,

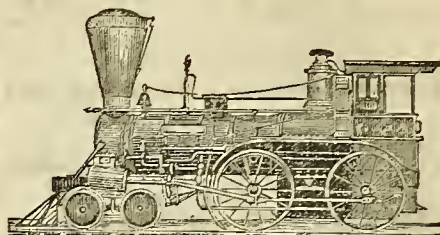
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.  
mar1-ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

Cotton Duck for Cr Covering ,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trimmings  
for windows and Seats. Varnish, Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.  
† oct.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

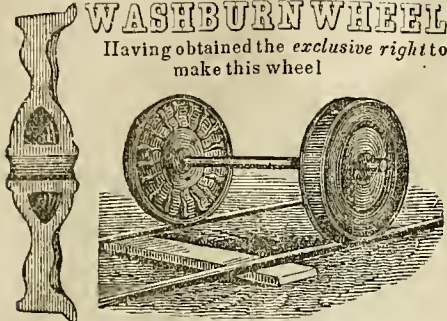
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps at the Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855 - 1



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Haul Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

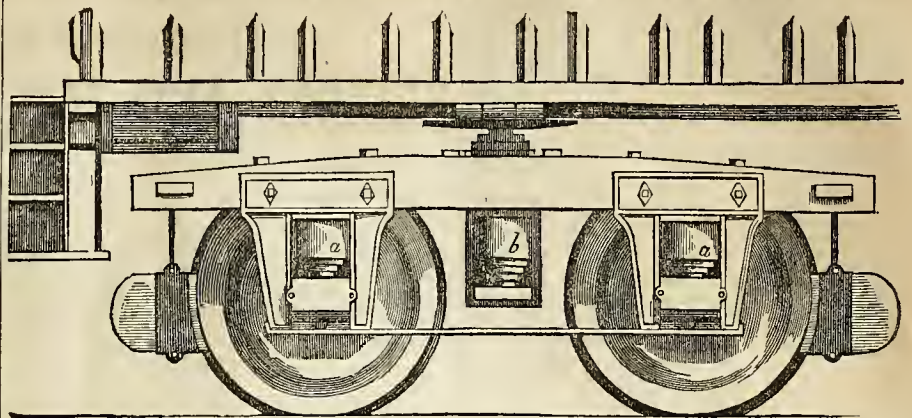
### WASTE,

Baggage Barrows and Cheeks, Freight Trucks,  
**CAR FINDINGS,**  
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED. oc23-17

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT, . . . M. D. WELLMAN, . . . C. M. RUSSELL

## DAVENPORT, RUSSELL & CO.,

## Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th JOSEPH DAVENPORT.

## MUSKINGUM WORKS

ZANESVILLE, OHIO.



## DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

## CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

## WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

## BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
jan1. Muskingum Works, Zanesville, O.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars

Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,  
1 n2+ NEWARK, N. J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted, connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup't.  
Racine, May 15, 1857. H. S. DURAND, President.  
my21

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

In connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [jan1-17] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park St., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN.

ERWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-1y

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-1f 10 Wall St., near Broadway, New York.

**SAFETY & ECONOMY.****JAMES HARRISON JR.'S****Automatic Steam Whistle,****FOR LOCOMOTIVES.****PATENTED APRIL, 1886.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

**T. F. RANDOLPH & BRO.****Mathematical Instrument Makers,**

**N. W. Cor. 5th & Walnut sts.,**  
**CINCINNATI, O.**

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

**RAILROADS, STEAMBOATS,****AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut St., Odd Fellows' Building;

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE****RECORD AND COPYING FLUID INKS.**

edgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton &amp; Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,**  
**STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,****No. 112 MAIN STREET,****East Side, between Third and Fourth Streets,**

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

**RAILROAD AND OTHER BLANKS,**  
Printed to order in the best manner.

**Ruling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

**ARE** prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

**PLATE CAR WHEELS and CHILLED TIRES** equal to any produced in the country.

**WHEELS and AXLES** fitted for use.  
**HYDRAULIC PRESSES** for pressing Oils and for other purposes.

**MACHINERY** of the most approved construction for Flouring and Saw Mills.

**GAS HOLDERS** of any size, and Machinery and Castings of all kinds for Gas Works.

**STEAM BOILERS and WATER TANKS** of any size or description.

**SHAFTING, PULLES and HANGERS.**

**WROUGHT IRON PIPE and FITTINGS** constantly on hand, and fitted up to order.

**Morley's Patent Railroad Chair.****PATENTED JUNE 2D, 1856.**

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered in the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mn.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C.

ap12

**Thorough Bred Stock FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,****"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JULY 30, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 23.

#### EDITORIAL.

Railroad Speeds and Fares .....	365
New York Central .....	365
Editorial Correspondence .....	366
Railroad Law .....	366
Conductors' Badges .....	366

#### RAILROADS.

Fox River Valley R. R. ....	366
Grand Rapids & Indiana R. R. ....	367
McGregor, St. Peter & Missouri R. R. Co. ....	368
Sabine & Galveston Bay R. R. & Lumber Co. ....	368
New York Central R. R. ....	368
Pacific R. R. ....	374
Mobile & Girard R. R. ....	376

#### MISCELLANEOUS.

The Business of Insurance—Highly Interesting Sta- tistics .....	367
Increase of the Steam Marine of Great Britain .....	367
Items on Cotton .....	367
Iron and Steel .....	370
Is Marietta to be a Switched-off Town .....	371
The Great Atlantic Telegraph .....	375
Railroad Fares .....	375

#### MONEY AND STOCKS.

Table of Stocks and Bonds .....	372
London Quotations .....	373
Monetary and Commercial .....	373
Sales at the New York Stock Board .....	373
Cincinnati Stock Sales .....	373

STATE OF THE ROADS.—We find many of the leading roads rather rough for this season of the year. We know of no way to account for this but in the supposition that the frequent rains have had this effect on the road beds, and thus impaired the foundation. An extra force should be kept at work, and the roads immediately brought into a state of good repair.

NEW YORK CENTRAL R. R.—Last week we noticed the resignation, by J. V. L. Pruyn, Esq., of the Treasuryship of this road. Mr. Pruyn has accepted the appointment of Counsellor General of the N. Y. Central R. R. Co. Gilbert M. Wilson, Esq., of Albany, has been appointed Treasurer of this company. Both these appointments are good ones for the company. The gentlemen whose services are thus secured have been long and faithfully engaged in the business of the company.

VOL. 5.—No. 23.

### RAILROAD SPEEDS AND FARES.

The business of railroading, like all others, is one which must be brought to perfection by constant improvement—improvement in the road—improvement in the machinery, and improvement in the system of operating and managing both road and machinery. Now while a host of inventors, each, anxious for the safety of the public and the highest improvement of the arts—but still more anxious for the ten dollars per mile or other net proceeds of their inventive genius, have spent years in perfecting the road bed and machinery of our railroads, very little change has been inaugurated in the system of charging for the work performed by railroads in carrying passengers from place to place. The only change that has taken place has been to reduce the charges for passenger transportation to such a point, that even the sharpest competition cannot reduce them any lower. Passengers are carried at all rates of speed, varying from 20 to 30 miles per hour in Express and Way trains, without the least regard to the actual expense of performing the labor of carrying them. A few figures will illustrate this.

According to the Reports of the New York Railroads, made Jan. 1855,

The speed of express trains in motion was.....	36 miles
do freight do .....	16 “
Cost of transporting passengers per mile was .....	1.136cts
do do freight per ton per mile .....	1.512 “
The receipts per passenger per mile were .....	1.95cts
do ton of freight do .....	2.79 “

Now the average weight of a passenger will not exceed 150 pounds, and yet the expense of transporting this 150 lbs. at 36 miles per hour is more than two thirds the expense of transporting a ton of freight at 16 miles per hour. Now this difference is mainly owing to the increased rate of speed at which the passenger is transported.

This then makes an important consideration for our railroad managers. If it is almost as cheap to transport a ton of freight at 16 miles per hour as a passenger weighing one fifteenth of that ton, at 36 miles per hour, it becomes an important question whether it is not the true policy of railroads to establish their rates of fare in proportion to the rate of speed at which the passenger is carried. We see but little propriety in charging the passenger who rides in the mail train at 18 miles per hour, the same fare that is charged the express passenger who must ride at 36 miles per hour, when the cost of transporting the latter is, to make a safe estimate, at least double the cost of transporting the former. The true policy of every business is to make each branch of business pay its own way. Now in railroading this seems to be overlooked entirely, and an arbitrary rule of charging without regard to cost or profit prevails.

The result is that one class of business is done either at cost or at a positive loss, while the deficiency must be made up on something else. A system as regardless of business

rules and policy as the one we have mentioned is founded in wrong and must sooner or later undergo a change. Such has been the experience of Europe and such must be our experience here. The only question in our opinion is one of time. And the sooner it is agitated, the better for our roads and the better for their stockholders.

The objection that competing lines, in their strife for business, will forever prevent the inauguration of a system which looks to higher rates, is easily answered. This competition must have an end somewhere, or finally result in the total ruin of the parties engaged in it. Whether railroad managers have a right, in their anxiety to increase their business, to sacrifice the interests of those entrusted to them, is not a question. They may do it for a while; but, like the dishonest tradesman, the result will be fatal to themselves. Stockholders must at last discover where their interests lie, and assert their rights.

In the case in point, of adjusting the rates of fare at a remunerating point, it will be just as easy for a convention of railroad managers to fix the scale of charges upon one basis as upon another. If it is conceded that nothing less than three cents per mile will pay roads for transporting express passengers, it will be as easy for the great through lines to establish that rate as a lower one. And the remedy for an unfair competition will be just as ready as in the recent case of the Erie Road, when it undertook to charge but one cent per mile for passenger transportation.

It may be answered that in some States legislation has fixed the maximum rate at two cents per mile. This is true; and it is also true that the railroad interest is too great a one to be wholly sacrificed. As a people, we are too greatly dependent on it socially, commercially and financially. It is our interest as a nation to foster the system which is adding to our national greatness and power—which is fast putting us in such a position that the combined world would hardly hazard an attack upon our seacoast—a system which represents our means of social and commercial intercourse, and affords us an investment of our surplus profits. It is our interest to foster our railroad system, and we give it as our opinion that no legislature would refuse such reasonable action as would be required to make this great system a paying one. Our railroads represent too much of the capital of our country for our legislators wilfully to persist in requirements fatal to its interests.

In conclusion we would say that it is our belief that this change is demanded by every consideration of interest and justice, and that it must sooner or later be adopted.

☞ We understand that an arrangement has been entered into between the N. York roads for a uniform charge of eight dollars from New York city to Buffalo.



## EDITORIAL CORRESPONDENCE.

NEW YORK, July 23, 1857.

The great event of the week in New York has been the acceptance of the Presidency of the Erie Railroad by Charles Moran, at a salary of *Twenty-Five Thousand Dollars* per annum. So the readers of the *Record* will observe that this great "Experiment" is to be crowned with the greatest experiment that ever was made in railroading—that of paying the highest salary ever paid in this country for the services of one man at the head of a railroad. It is a notorious maxim now-a-days that railroads will bear anything; and, acting on this, we suppose that the Directors of the Erie Road expect their road to bear a salary equal to that of the President of the United States. We are not thoroughly posted as to who Mr. Charles Moran is, but have no doubt he is believed by the Board to be a gentleman of sufficient talent for the place—experience, I believe, they do not claim for him. He is said to be of German origin, and to have been in the directory for some time. It is supposed that he will carry his notions of economy to a considerable extent, and will retrench, as far as he is able so to do, the expenditures of the company. How far he will be able to do so remains to be seen. For ourselves, we confess that we should have more faith in his success if he were sustained by some active and thoroughly competent man of great practical experience, and of unquestioned ability, to fill the now abandoned post of Superintendent. This would relieve the President from the onerous duties of a mere mechanical director of the machinery and working operations of the road.

Since our last we have had a little experience in steamboating, which we presume is not dissimilar to that of others who have met with similar accidents. Saturday evening we undertook to go up on the evening boat to Albany. It was the night for the Isaac Newton, one of the largest boats on the Hudson. We had proceeded about thirty miles up the river when we suddenly found the boat stopped, and learned at last that the upper cylinder-head had burst. Here was a fix. The captain at once proceeded to the residence of Mr. Newton, seven miles from the seat of the accident, to get orders as to what was to be done. Had it been seventy miles, instead of seven, we suppose he would have done the same thing. During this time an alarm of fire was raised in the ladies' cabin, occasioned by the burning of the gauze ornaments on an oil lamp; and such a scene of confusion as we witnessed we hope not to see again very soon. The passengers were thoroughly alarmed. The combustible nature of the boat and the remembrance of some fearful accidents near the very spot where we were, tended not a little to increase the alarm. The extent of the mischief was finally ascertained, and everything was quiet again. During the

whole confusion, and for some time after, we could not find a *single officer* of the boat. Instead of being the first to quiet the excited passengers, and assure them that they had the means of extinguishing the flames, they were nowhere to be seen. It was the greatest outrage we have ever witnessed, and should be resented by the traveling public. For ourselves, we shall be exceedingly careful how we again entrust our lives to the care of men who can be so regardless of the rights of those who trust them. We were finally taken back to New York, placed alongside the Hendrick Hudson, and kept waiting till every pound of freight was transferred. The Hudson then started, as we supposed, for Albany, but stopped at her regular landing to coal up, and we left, perfectly satisfied with our experience on the Hudson. Steamboats may have been once a desirable means of traveling, but that time has passed. They are neither as safe nor as expeditious as railroads; and, in case of accidents, judging from our late experience and the fatality that has attended many recent calamities on the water, passengers must look out for themselves, for they cannot expect much from the officers of the boat. Were a single railroad to exhibit as little regard for the safety and comfort of its passengers, it would be at once and deservedly cried down by the whole community.

We visited to-day the Stock Board. To one who has never seen its proceedings it would be difficult to give a clear idea. The President of the Board calls off the securities in their order on the list. As soon as the name is announced the brokers who have them to sell call out their price and terms as rapidly as possible—two or three frequently speaking at once—while those who wish to buy call out the price they will give, or accept the offers of the sellers. This makes an exciting scene in favorite securities, and amounts to little more than a simple betting on the price the security will bring to-morrow, or ten, thirty, sixty or ninety days hence. As such, the proceedings of the Stock Board loses its interest and importance, and is not entitled to the weight we are apt to attach to it.

W.

**RAILROAD LAW.**—We call the attention of our railroad friends to the following notice, from the New York *Evening Post*, of a forthcoming work designed for their use. We cheerfully endorse the remarks of the *Post* relative to the ability of the author, and have no doubt but that he will produce a work that will be eminently practical and useful to all engaged in railroad business:

"A treatise on the American Law of Railroads, by Edward L. Pierce, of the Boston bar, designed for the use of attorneys and the officers of railroad companies, will be published in a few weeks, by John S. Voorhies, Law Publisher, of this city. It will comprehend the discussion, with a full citation of the au-

thorities, of the various points on railroad law which have been judiciously determined, including the power of the Legislature over the company, the liability of the subscribers to the capital stock, the validity of municipal subscriptions, the fraudulent issue of shares, the acquisition of a right of way, with the mode and rules of assessing damages to the land-owner, the various classes of injuries committed by the company, its liability upon its contracts, and as a common carrier of goods and passengers, and the validity of railroad mortgages. There is a large mass of American authorities on most of these points; mainly accumulated within the last fifteen years, which have not yet been digested in any treatise. The English books on the subject are mostly confined to a collection and analysis of the statute law of that country, and are, therefore, of little service in the United States.

Mr. Pierce is a laborious investigator and a clear and practised writer, and has had opportunities to produce a valuable work on the important subject which he proposes to treat."

**CONDUCTORS' BADGES.**—We noticed a few conductors and but few only, who begin to dispense with the conductor's badge while in the discharge of their duty. It may have been through carelessness or it may have been a designed omission. We regard it as an important one and should advise superintendents to see to it that they have no men engaged as conductors who are above wearing their badge of office while on duty. The services of such men are not worth retaining.

From the Milwaukee Sentinel.

**FOX RIVER VALLEY RAILROAD.**

According to previous notice, the citizens of McHenry county, Illinois, assembled at the Dayton House, in the village of Richmond, for the purpose of considering the importance of the early completion of the Fox River Valley Railroad, from that place to Milwaukee, Wis.

The meeting was called to order by appointing John Sibley, Esq., President, and Dr. R. R. Stone, Secretary.

After the object of the meeting had been stated by the Chair, the President of the road, Mr. Kneeland of Milwaukee, came forward and stated, in a clear and forcible manner, the condition of the road, and its importance to the city of Milwaukee, and the villages and the farming community along the line, after which the audience listened to very interesting remarks from Messrs. Belden and McKisson, of Wis., and Messrs. McConnell, Andrews and Cotting, of Ill., when the following preamble and resolutions were read, and unanimously adopted:

*Whereas*, The citizens of McHenry County, and the resources of the county, imperatively demand a direct communication by Railroad, in an east or north-east direction, to intersect with the navigation of Lake Michigan, that being the legitimate and natural course of our trade. Therefore,

*Resolved*, That we, the citizens of McHenry county, do prefer the Milwaukee market to any other east or north-east on Lake Michigan, and that we will unite and co-operate with the people of Milwaukee, and on the line, in prosecuting and completing the Fox River Valley Railroad, as soon as practicable



from the State line near the village of Richmond, to Milwaukee.

*Resolved*, That we will pledge ourselves, in order to prosecute and complete said Road, to subscribe to its capital stock, to the amount of from fifty to seventy-five thousand dollars.

On motion, the Chair appointed the following named persons as an Executive Committee, to solicit stock subscriptions to said road:

Of Richmond—Wm. A. McConnell, John Sibley, J. W. Arkills, C. G. Cotting, A. T. Brown.

Of Hebron—Robert Stewart, Charles Lyon, H. D. Bates.

Of English Prairie—Wm. Turner, Richard Wray, J. Emerson, Harvey Wilson.

Of Solon—John W. Nichols, D. C. Andrews.

Of Ringwood—A. H. Nixon, Geo. Vasey.  
JOHN SIBLEY, President.

R. R. Stone, Sec'y.

### THE BUSINESS OF INSURANCE—HIGHLY INTERESTING STATISTICS.

At a recent meeting of the London Statistical Association a paper was read by S. Brown, Esq., on the subject of insurance. We abstract some of the statements therein made, and report them in federal currency:

There are only 65 insurance offices in England and Wales, of which 39 are in London; there are but 7 in Scotland and 2 in Ireland—making 74 in Great Britain. The amount of property of all kinds insured is \$5,400,000,000. Mr. Brown gave a sketch of the history of fire insurance in Great Britain, stating that the earliest attempts were made in London during the reign of Charles the Second; and in 1680 the Court of Common Council issued policies, and continued to do so for about two years, when it cancelled its policies and returned the premiums. In 1691 the Hand-in-Hand Fire Insurance Company was established, in 1706 the Sun, in 1714 the Union, in 1717 the Westminster, and 1721 the Royal Exchange and the London Assurance; Lloyd (underwriters) was established in 1772.

In France a larger amount of property is insured than in England, as by the laws of that country a tenant must answer for a fire, unless he can prove that it happened by accident, or by fault of construction, or that it was communicated by an adjoining house. In France there is an insurance on \$8,700,000,000. In Belgium the amount insured is \$630,000,000. From Holland no information could be obtained. In Sweden there are five companies in Stockholm, besides some minor local mutual associations in the provinces. In Denmark there was a company established in 1778, and remodelled in 1854, which has a privilege for insuring goods, furniture and movable property.

The late Czar of Russia in 1847 forbade the insurance of property situated in Russia with foreign offices, under the fine of 3 per cent. on the sum insured. By the same ukase a tax of  $\frac{1}{4}$  per cent. is levied on the amount of every policy, to contribute to defray the expenses of the administration of police in the district in which the property insured is situated. It is estimated that \$150,000,000 are insured in Russia, and \$80,000,000 in the kingdom of Poland. In Germany it appears twenty proprietary offices insure \$1,425,000,000, the mutual companies \$2,000,000,000, and the government offices \$2,250,000,000—total \$5,675,000,000!

The average annual insurance offices in all

countries are estimated to be the immense sum of twenty-three millions of dollars.

Some curious items occur as causes of fire. In London, for instance, about one case occurs each year from the following named causes: Sewing and reading in bed, hunting bugs, thawing a water pipe, bursting of a bottle of whisky, frying fish, suicide by charcoal, warming beds and sealing letters. Places of worship exhibit a very considerable per centage of total destruction; and thirty-four cases of fires in theaters in twenty-four years showed no medium between complete destruction and slight damage.

**INCREASE OF THE STEAM MARINE OF GREAT BRITAIN.**—But few of our commercial men, perhaps, are aware of the extent to which British capitalists are embarking in the construction of iron steam propellers for ocean service. This great interest was but partially developed before the late Russian war; but that war gave an impetus to this branch of the British steam marine, which threatens to largely supersede us in the passenger and light freight business. As evidence of this, we have but to refer to the recent establishment of a new British line of steamers between Southampton and Bremen, also between New York and Glasgow, and New York and Liverpool—these steamers sailing for the several ports semi-weekly from New York.

This has excited no little alarm in the minds of those largely interested in the carrying trade.

The packet ship Columbia, of the old Black-Ball line of Liverpool packets, whose regular sailing day was the first of July, has not yet been able to complete her engagements for a full cargo. This line has been celebrated for punctuality in sailing upon the days advertised. This is the first instance in thirty years that any ship of that line has had to lay over for so long a period after the regular day of sailing. This will give some idea of the great depression of the commerce of this port.

At this moment there are no less than *three hundred steam propellers*, ranging from one thousand to fifteen hundred tons, building on the Clyde and in the ports of Great Britain. The steam engine builders were never more busy than at the present time, and we learn that Napier, the celebrated steam engine builder, has more work engaged than can be executed by him for three years to come.—*New York Times*.

### THE GRAND RAPIDS AND I. R. R. CO.

For a few days past the Stockholders of the several organizations of the above named roads have been holding meetings for the purpose of effecting a consolidation of all divisions of the road, the result of which is that a majority of each division have voted for the consolidation, which has been unanimously effected.

The consolidation having been perfected, and all the companies merged into the "GRAND RAPIDS & INDIANA R. R. COMPANY"—the Company re-organized by the election of all the old Directors, who subsequently met and re-elected the old officers of the Company, as follows:

**DIRECTORS**—Sarell Wood, James Scribner, Wilson C. Edsell, Abram Hoag, Patrick Marantette, Phillip H. Buck, Jonathan G. Wait, William Henry, Joseph Lomax, Francis F. Jewett, William S. Boyd, John L. Doty, William Allman.

**OFFICERS OF THE COMPANY**—Joseph Lomax, President; William Allman, Secretary; Richard Reed, Treasurer; and Josiah D. Cook, Engineer.

We are informed that so far as the *engineering* is concerned, the explorations and preliminary surveys have all been made, and the line located from Grand Rapids to Mackinaw, the profiles and maps of which will soon be made out and ready to submit to the Board, when that part of the line will be located.

We should mention that the result of this consolidation makes the Company's line extend from Fort Wayne on the south to Mackinaw on the north. We may now look for a speedy completion of the road, which will give us a great thoroughfare of which both Michigan and Indiana may well be proud.—*Sturgis Repub.*

From the Montgomery Daily Messenger.

### ITEMS ON COTTON.

Will the growing crop of Cotton be an average one? That is a question you have asked daily and hourly. This question may be solved proximately, by recurring to the crops of previous years. By basing our calculations on the past, we are taught by experience that we may, with some confidence, predict what the future will develop. In order to attain a conclusion as to the extent of the growing crop, the following table will be of service. It has been prepared with care and from reliable data, and as far as the past is concerned it may be relied on as strictly accurate:

Latest Spring frost.	Earliest Fall frost.	Crop.
1849, April 19.....	Nov. 8.....	2,096,706
1850, April 7.....	Oct. 26.....	2,355,257
1851, April 22.....	Nov. 6.....	3,015,000
1852, April 6.....	Nov. 7.....	3,262,900
1853, Mar. 15.....	Oct. 25.....	3,920,000
1854, April 29.....	Nov. 5.....	2,848,300
1855, Mar. 28.....	Oct. 25.....	3,526,845
1856, Mar. 30.....	Sept. 23 (estimated).....	2,950,000

The foregoing table, I will assume, shows the period of time the plant has to grow and mature, that is to say, the time betwixt the Spring frost and the Fall frost, will be the time that Cotton will grow and continue to produce. This being so, we find that the plant was growing and making in

1849, 6 months 19 days	1853, 7 months 10 days
1850, " 19 "	1854, " 6 "
1851, " 14 "	1855, " 28 "
1852, 7 " 1 "	1856, 5 " 23 "

It will be seen from the first table whenever frost appears late, or any time in April, we have a corresponding late Fall Frost. This is invariably the case. I argue, then, that we shall not have frost before the 8th or 10th of November. If frost does not appear till the 10th, then we have the following result:

Latest Spring frost.	Fall frost.	Growing season.
1857, April 22.....	Nov. 10.....	6m. 18 days.

This last, it will be perceived, is very little short of the average growing season.

It is admitted by all that there has been a large increase in the quantity of land planted this year. The opening of new cotton lands in Texas and Arkansas will add a large per centum to the quantity, and the price of cotton for the two last seasons has stimulated a large increase in the quantity planted in Alabama, Mississippi, and Louisiana, to say nothing of other States. I think, therefore, that 12 $\frac{1}{2}$  per centum may safely be added to the area of land planted this year. Taking the average of the last five years as a basis, and adding 12 $\frac{1}{2}$  per cent. for the increase of cultivation, and the growing crop may be estimated at 3,491,684 bales, to wit:

Crop of 1852.....	3,262,892 bales
" 1853.....	2,930,028 "
" 1854.....	5,847,842 "
" 1855.....	3,527,845 "
estimated 1856.....	2,950,000 "
Average for 5 years.....	3,113,719
Add 12 $\frac{1}{2}$ per cent.....	387,965

3,491,684

☞ All the engines on the Providence & Worcester Railroad are run with coal, except one, and even that is under orders to be made into a coal-burning machine. This is said to save one-half the cost of fuel.



**SABINE AND GADNESTON BAY R. R. AND LUMBER CO.**—We understand that the Engineer with his corps, who have now been at work on the above road for the past three months, will have completed all their surveys so as to be ready to break ground, on or before the 1st of September next. The lines now necessary to determine the best location of the road, have exceeded one thousand miles, and now it only remains to run a few more lines to determine the best point of crossing the Trinity.

It is ascertained that there will be sixteen bridges between the Sabine river and Buffalo Bayou. It is not yet ascertained where the western terminus of this road will intersect the Galveston, Houston and Henderson R. R., as the latter company have not yet decided where they will cross Buffalo Bayou. We are glad to learn that this road is extremely popular in the country through which it passes and in Houston. In the latter place ONE HUNDRED THOUSAND DOLLARS of stock were taken last week, and the five per cent paid subject to calls for 10 per cent more than wanted.

The charter of this company requires that twenty-five miles shall be completed by September 1st 1859, which will doubtless be done much sooner. Our readers are doubtless aware that A. H. Gentry, Esq., who is well known as one of our most enterprising citizens, is the President of this company, and is devoting much of his time to its interests. Three fifths of the Directors are also citizens of this State and the company is so organized that it must always be under the control of the Texas Stockholders.

#### MCGREGOR, ST. PETER & MISSOURI R. R. CO.

This Company, under its new organization, has adopted a plan for operations, similar in some respects to that now used by the Milwaukee & Horicon Railroad Co.

They propose to invest one half of the subscriptions in government lands and other low priced lands near the located line of the road, and to expend the other half in construction. The lands to be annually appraised and portions thereof sold under the directions of the Board.

The *McGregor Times* says:

The rapid advance of real estate at present is incredible and how much larger must be the ratio when a line of Railroad will render the interior easier of access than were the river towns a few years since. The above system has the sanction of our best financiers, and the company have (on this basis) promises from heavy eastern Capitalists of their assistance in pushing along the work.

The proposition of McDonald and Graham having been declined, the Secretary and Engineers were instructed to give public notice of the letting of the work on the first nine miles by sections; sealed proposals being received therefor at the office of the company up to Thursday August 6th.

In conclusion it was resolved to expend \$180,000 on the work by the 1st of January 1857.

This road is, practically, the extension of the Milwaukee and Mississippi Railroad into the fertile regions of Iowa, and its progress is looked to with great anxiety from this quarter.

**RAILROAD IRON ARRIVED.**—Since the opening of navigation this year, the railroad iron received at this port has reached a valuation of nearly \$230,000, on which duties have been paid at the Custom House, amounting to about \$80,000.

**THE SOUTH PASS WAGON ROAD.**—The party engaged in opening the South Pass Wagon Road to the Pacific, under the command of Col. William Nobles, includes a well known Baltimorean, and several gentlemen belonging to other places, but having many friends in this city. According to letters received from the party, and dated Hole in the Wall, July 2d and 5th, the party are all in good health and spirits, and waiting for the return of Mr. Samuel Medary, the engineer, from Fort Ridgely, whither he had gone to get a howitzer. Grizzly Bear, a friendly Indian, had been in camp and stated that two hundred Indians of the Inkas band were encamped between the Jacques and Sioux rivers, determined to prevent the cutting of the road through their territory, unless they were paid for it. About fifty Indians were encamped near the party. Inkapadotalis band, the "woman killers," are said to be encamped on the Sioux or Jacques rivers. The soldiers are looking out for him, but the pioneers say they are not looking in the right place. Col. Dwier, of Baltimore, is busily engaged in putting the party through rifle practice, preparatory to any hostile meeting.

The Fourth was celebrated in becoming style, the toasts being drank in spring water. The letters referred to were sent by a trapper.

## Railroads.

[From the American Railroad Journal.]

### NEW YORK CENTRAL RAILROAD.

The success that attended the early railroad enterprises of Great Britain turned the attention of every portion of the United States to those works, and nearly every State immediately commenced their construction. The first work of the kind undertaken in the State of New York was the Mohawk and Hudson, the name of which was changed in 1845 to the Albany and Schenectady. It connected those two cities by a line of about sixteen miles. It was chartered in 1826, being one of the very first chartered in the United States. The committee of the Legislature to whom was referred the petition for a charter, alluding to the experiments then going on in England with these works, said that "there is not a single instance of a railroad of any extent in this country known to the committee, and it remains an experiment yet to be tried. It is under these circumstances that the petitioners are willing to make the first experiment of the kind with their own private resources. The present occasion offers a fair opportunity for trying the experiment, without expense to the State, how far the contemplated improvement is applicable to our soil and State."

The construction of the road, however, was not commenced till August, 1830. It was opened on the 24th of September, 1831. The ascents from Albany and Schenectady, respectively, were overcome by *inclined planes*, each having an inclination of 1 foot in 18. The length of the Albany *plane* was 32 chains; that of the Schenectady *plane* 31. Between the planes, which were worked by stationary engines, locomotives and horses were for a time both used. At the opening of the road *three* cars, containing twenty passengers each, were taken from the head of the plane at Albany to the head of the plane at Schenectady, 15 miles, by an American engine, weighing three and a half tons, in forty minutes. This was regarded as a most astonishing feat. The less favored passengers were taken in seven

cars, drawn by horses, over the road between the planes, in one hour and a quarter. From a statement published at the time, we are told that the company possessed another English-made locomotive engine weighing twelve tons; but it was found, upon experiment, that its great weight seriously injured the superstructure of the road. The wheels of this engine were wood, with wrought iron tires. The rails used were 9-16 by 2½ inches, and were laid upon longitudinal sills.

A leading object of the work was the transportation, from Schenectady to Albany, of the freight brought to the former place on the canal. As the distance by railroad between these places was not two-thirds as great as by the line of the canal, and as the trade upon the latter was obstructed by a large number of locks around Cohoes' Falls, it was supposed that its freight would leave the canal for the railroad. For its accommodation, the road was extended to the basin at Schenectady, where extensive warehouses were erected, and to the Hudson river at Albany. These expectations were entirely disappointed, while the outlay upon which they were based added largely to the cost of the work and the embarrassment of the company.

The first cost of the road, according to a report made by the company to the Legislature of the State in July, 1832, was \$483,215 46. The report also stated that a further expenditure of \$156,690 would have to be made to complete the work. This estimate was rapidly increased to \$1,000,000 for further improvements and outlays upon the road and machinery. It remained at about those figures till the commencement of 1844, when the planes were abandoned and the routes they occupied adapted to the passage of the locomotive. The tracks also received improvements which rendered the road a first class work of the present day, and nearly trebled its cost. Owing to its excessive cost—exceeding \$100,000 per mile—this road was the most unproductive of all the lines between Albany and Buffalo. A few dividends were paid at an early period in its history. Subsequently, for several years, and until the road was completely rebuilt, the net earnings were put into construction; when the road was rebuilt they were resumed, and reached 8 per cent. upon its consolidation with the Central.

The second link in order in the great line was the *Utica & Schenectady*. This road was chartered in 1833. The work of construction was commenced in the latter part of 1834, and the road opened for business on the 1st day of August, 1836. The route of this, as of all the links, with the exception of the Albany & Schenectady, was a very favorable one. The superstructure of the road was similar to that of the Albany & Schenectady, the rail being a flat bar laid upon a longitudinal sill. A portion of this was not removed till 1849 or 1850.

For a notice of the history of this road there are scarcely any other materials than those furnished by naked statements of its cost and earnings, it never having been the policy of the company to make public exhibits of their affairs. It was one of those instances where extraordinary success became a motive, if not for concealment, at least for not displaying a success that might excite envy, and probably competing roads. The degree of this success will be seen in the following statement:

The total amount of installments paid into



this road amounted to \$4,500,000 (the greater part of the calls being met by extraordinary dividends from earnings). The interest on the same, at the rate of seven per cent., up to the first day of August next, just twenty-one years after the opening of the road, will be \$4,294,416, making the total cost or value of the investment \$8,794,416. The total amount of dividends and interest on railroad bonds paid in the same time (assuming the company will pay its usual four per cent. semi-annual dividend on the 1st of August) will be \$7,662,700. The interest on the same will be \$2,314,557, making a total of receipts or profits resulting from the operation of the road of \$9,977,257, leaving a balance of profits equal to \$1,182,841. The stockholders have, in addition, stock in the consolidated road to the amount of \$4,500,000, and dividend bonds issued at the time of the consolidation, equal to 5 per cent. of the stock, or \$2,475,000. Adding these sums to the surplus profits arising from the road, over and above its cost, the total profit on the investment is \$8,157,841. At the time of the consolidation the road was every way the best in the United States, having a double track and ample equipment. Its wonderful success must have been the result of a species of management which is very rare at the present day.

The third link in order was the *Syracuse & Utica*. This road was chartered in 1836. Its construction was commenced in 1837. It was put in operation July 3d, 1839. Its cost July 1, 1840, was \$914,389. The total receipts for the year 1839 were \$125,623, of which were received from passengers \$121,972; U. S. Mail \$2,651; freight \$850. The total expenses of the same period were \$34,738. A considerable portion of this road was opened in 1838, during which time horses were largely used for propelling the trains. As in the case of the *Utica & Schenectady* Railroad, the published history of this one is chiefly embraced in the statement of its cost, earnings, &c., to be found in the subjoined tables. This road has been uniformly productive, but not so much so as the *Utica & Schenectady*.

The fourth link in the line was the *Auburn & Syracuse*. This road was chartered in 1834. Its construction was commenced in 1836. It was partially completed in 1837, and from July 1st, 1838, it was operated by horse power for a length of 22 miles, the cars running on wooden ribbons laid on longitudinal sills. It was finally completed in 1839. We have been unable to obtain any statistics of this road previous to 1843. It was consolidated with the *Auburn & Rochester* in 1850, under the title of the *Rochester & Syracuse* Railroad.

The fifth link in the original line from Albany to Buffalo was the *Auburn & Rochester*. This road was chartered in 1836; was commenced early in 1838, and opened for business in August, 1841. It was consolidated with the *Auburn & Syracuse* Railroad in 1840. We can give little information in reference to this road, save what is to be found in the subjoined tables.

The sixth in the line was the *Tonawanda*. This road was chartered in 1833. Its construction was commenced in the fall of 1834. It was opened to Batavia, a distance of 31½ miles, in May, 1837. On its first opening both horse and locomotive power was used. Its cost to Batavia, with equipment, buildings, etc., was less than \$400,000. In 1842 it was

extended to Attica, 12 miles beyond Batavia. In 1851 it was consolidated with the *Buffalo & Attica* Railroad, under the title of the *Buffalo & Rochester* Railroad.

The seventh and last link in the original line was the *Attica & Buffalo*. This road was chartered in 1836, and was commenced in September, 1841, and completed in December, 1842, forming the last link in the great Central line. The commencement of the new year was signalized by the formal opening of a continuous line of road from Albany to Buffalo, a distance, by the route then traveled, of 327 miles.

The above roads composed the original links in the great line from Albany to Buffalo. These were reduced to *par* previous to their final consolidation in the Central. In the meantime the *Rochester & Syracuse* Company constructed and completed in 1853 the *Air Line* Railroad between Syracuse and Rochester, reducing the distance 24 miles between those cities, over the old road. The route by this road being nearly level and straight, was in many respects a great improvement over the old line for the *through* traffic. It added 80 miles to the original line of 104½ miles. The total cost of both lines in 1853 was \$6,506,301.

At the date of its completion the cost of the through line was \$6,455,908. The total receipts from passengers in 1844, two years after its opening, was \$1,048,066; from freight \$69,803; mails, etc., \$68,346. The increase of receipts from passengers up to 1856 has been \$2,155,312; from freight \$4,258,239; mails \$103,582.

Several other lines were consolidated into the Central. The earliest constructed of these was the *Troy & Schenectady*. This road was chartered in 1836. It was commenced in 1841, and was completed in 1842. It was constructed by the people of Troy, for the purpose of securing to themselves the advantages of a connection with the great line to Buffalo. It was uniformly unproductive. This was in part owing to the influence of the Central line, which endeavored to throw all its business upon Albany.

The *Rochester, Lockport & Niagara Falls* Railroad was another of the consolidated lines. It was completed only one year previous to the consolidation. The opening of the Great Western of Canada has since rendered this a very important portion of the Central Road.

The *Buffalo & Lockport* Railroad, also consolidated in the Central, was not completed when the consolidation took place. It was stipulated, by the terms of the consolidation, that the cost of the road should not exceed \$675,000. It was opened in 1854.

The *Rochester, Lockport & Niagara Falls* having taken a permanent lease of the *Rochester & Lake Ontario* Railroad, with an agreement for consolidation on equal terms, this contract was assumed by the Central Company. The stock of this road has been merged in the Central, legislative permission therefor having been obtained. Its cost was \$150,000. It was completed in 1853.

The *Buffalo & Niagara Falls* Railroad was leased by the Central December 22d, 1853, to be maintained by the latter, and to receive the same rate of dividends paid upon the stock of the former. The road was operated on account of the Central from and after July 1st, 1853. It was consolidated with the Central, for which stock has been paid to the amount of \$565,000.

*Lewistown* Railroad. This road was completed early in 1854; was leased by the Central, and has since been consolidated with it. The amount of stock issued by this company was \$354,260.

As the stocks of several of the roads were at a premium at the time of the consolidation, the following statement will show the amount of stock in each company, the rate of the premium agreed and paid, and the amount of the same:

	Stock & Bonds	Rate of prem. per ct.	Am't to each Comp'y
Albany & Schenectady.....	\$1,621,800	17	\$ 275,706
Utica & Schenectady.....	4,500,000	55	2,475,000
Syracuse & Utica.....	2,700,000	50	1,350,000
Rochester & Syracuse.....	5,608,700	30	1,682,650
Buffalo & Rochester.....	3,000,000	40	1,200,000
Troy & Schenectady.....	650,000		
Mohawk Valley.....	1,575,000	55	866,250
Syracuse & Utica (D. L.).....	600,000	50	300,000
Roch., Lockport & N. Falls..	2,155,100	25	538,775
Buffalo & Lockport.....	675,000	25	
Rochester & Lake Ontario.....	150,000	25	37,500
Buffalo & Niagara Falls.....	565,000		
Niagara Falls & Lewistown..	354,265		
	\$24,154,860		\$8,694,500

The stock of the *Troy & Schenectady* Railroad not being considered worth *par*, the holders of the same were required to pay in an installment of twenty-five per cent. on the same.

The premium bonds bear six per cent. interest, and are payable on the first day of May, 1883. For their redemption a provision is made for a sinking fund equal to one and a half per cent. annually upon the amount of such bonds.

The consolidated company also agreed to assume the funded debt of the old coupons not convertible into stock. These debts were as follows:

Albany & Schenectady.....	\$926,823
Troy & Schenectady.....	100,000
Syracuse & Utica.....	126,000
Rochester & Syracuse.....	756,000
Buffalo & Rochester.....	200,000
Rochester, Lockport & Niagara Falls.....	476,000
Total.....	\$1,884,823

The consolidated company also assumed the subscriptions made by several of the companies to the stock of the Great Western of Canada and the *Buffalo & State Line* Road, as follows:

Stock taken by the Albany & Schenectady in the Great Western.....	\$ 25,000
Stock taken by the Utica & Schenectady in the Great Western.....	200,000
Stock taken by the Syracuse & Utica in the Great Western.....	75,000
Stock taken by the Syracuse & Utica in the Buffalo & State Line Railroad.....	62,300
Stock taken by the Rochester & Syracuse in the Great Western.....	125,000
Stock taken by the Rochester & Syracuse in the Buffalo & State Line Railroad.....	105,500
Stock taken by the Rochester, Lockport & Niagara Falls in the Buffalo & State Line.....	68,500
Stock taken by the Buffalo & Rochester in the Buffalo & State Line Railroad.....	94,900
	\$850,550
Add premium of 20 per cent. in the stock in the Buffalo & State Line Railroad.....	52,650
	\$903,200

The last named bonds have six per cent. interest, and are payable on the first day of May, 1883.

The total liabilities of the old company assumed by the new were as follows:

Stock.....	\$24,154,860
Unconvertible bonds.....	1,881,236
Bonds issued for stock as above.....	903,200
	\$26,939,296
Add premium bonds.....	8,694,500
	\$35,633,796

Since the consolidation the liabilities assumed on account of the old company have



been somewhat reduced. A new issue of bonds, however, was made to the amount of \$3,000,000, payable in 1864.

The following statement will show the amount of the bonded debt of the company as it was on the 30th Sept., 1856 :

6 per cent. premium consolidation bonds, payable in 1853.....	\$8,892,000 00
ALBANY AND SCHENECTADY R. R.	
5 per cent. Albany bonds, payable 1864.....	125,000 00
7 per cent. company bonds.....	9,700 00
SCHENECTADY AND TROY R. R.	
6 per cent. State stock, payable 1867.....	100,000 00
SYRACUSE AND UTICA R. R.	
7 per cent. due in 1864.....	1,000 00
ROCHESTER AND SYRACUSE R. R.	
5½ per cent. State stock, payable 1860 and 1861.....	\$200,000 00
Deduct sinking fund.....	101,584 67
	\$98,415 33
5 per cent. State stock, payable 1858.....	200,000 00
BUFFALO AND ROCHESTER R. R.	
5½ per cent. State stock, payable 1863.....	\$100,000 00
Deduct sinking fund.....	37,152 90
	62,847 10
ROCHESTER, LOCKPORT AND NIAGARA FALLS R. R.	
7 per cent. company bonds, payable 1857....	156,000 00
Do. payable 1851.....	300,000 00
7 per cent. bonds Buffalo & Niagara Falls Company, payable 1857, '58, '59.....	5,000 00
Do. payable 1864.....	50,000 00
Bonds to extinguish debts of consolidated companies.....	331,000 00
6 per cent. bonds issued to Buffalo & Niagara Falls Company, payable 1883.....	\$110,800 00
Deduct cancelled do.....	7,700 00
	103,100 00
6 per cent. bonds given by companies before consolidation, payable 1883.....	\$817,000 00
Deduct cancelled do.....	5,000 00
	812,000 00
6 per cent. real estate bonds, payable 1883.....	\$235,000 00
Deduct cancelled.....	14,000 00
	221,000 00
7 per cent. real estate bonds before consolidation.....	286,234 86
6 per cent. telegraph bonds, payable 1860....	10,000 00
7 per cent. convertible bonds, payable 1864....	3,000,000 00
Total bonded debt.....	\$14,763,897 29

Below we annex a copy of the balance sheet from the company's ledger, Sept. 30, 1856 :

	Cr.
Railroad and equipment.....	\$29,766,372 50
Cash in banks.....	833,790 47
Passenger and Freight Agents; balances since remitted.....	342,364 23
D. Richmond, Trustee; South shore line of Lake Erie steamboats.....	44,469 93
Michigan Central R. R. Co.; North shore line of Lake Erie steamboats.....	193,925 27
Buffalo & State Line R. R. Co. stock.....	421,150 00
Lewistown R. R. Co. stock.....	142,110 69
Troy Union R. R. Co. stock (10 per cent. paid).....	717 50
Hudson River Bridge Co. stock (5 per cent. paid).....	10,080 00
Bills receivable.....	192,664 60
Debt certificate sinking fund.....	470,000 00
Future income; proportion of debt certificates, &c., chargeable to the income of the company from Sept. 30, 1856, to May 1, 1857.....	\$538,176 14
General Post Office Department.....	32,372 60
Trustees Buffalo & Rochester R. R. Co....	3,108 97
Rent account; accrued to Sept. 30, 1856....	10,023 97
Real estate purchased of Buffalo & Niagara Falls R. R. Co.....	32,500 00
	\$41,033,826 82
	Dr.
Capital Stock.....	\$24,136,660 69
Funded debt of Albany & Schenectady R. R. Co.....	134,700 00
Funded debt of Schenectady & Troy R. R. Co.....	100,000 00
Funded debt of Syracuse & Utica R. R. Co.....	1,000 00
Funded debt of the Rochester & Syracuse R. R. Co.....	298,415 33
Funded debt of Buffalo & Rochester R. R. Co.....	02,847 10
Funded debt of Rochester, Lockport & Niagara Falls R. R. Co.....	456,000 00
Funded debt of Buffalo & Niagara Falls R. R. Co.....	55,000 00
Debt certificates.....	8,892,600 00

Bonds for convertible loan.....	3,000,000 00
" railroad stocks.....	812,000 00
" real estate.....	221,000 00
" funded debts of old companies.....	331,000 00
Bonds to Buffalo & Niagara Falls R. R. Co.....	103,100 00
Bond to Telegraph Co.....	10,000 00
Bonds and mortgages.....	286,234 86
Bills payable.....	194,731 54
Trustees of the Utica & Schenectady R. R. Co.....	20,162 11
Trustees of the Syracuse & Utica R. R. Co.	796 92
Liabilities assumed for Rochester & Syracuse R. R. Co.....	25,477 54
Expenses of operating road; balance of Sept. disbursements, paid in Oct.....	202,112 59
Interest accrued to 30th Sept., including coupons retained from Buffalo & Rochester R. R. Co.....	388,952 14
Income account; balance on 30th Sept., 1856.....	1,301,036 00
	\$41,033,826 82

## IRON AND STEEL.

BY CHRISTOPHER BINKS.

### I.—Introductory.

The existing and generally received theory of the formation and the alleged actual composition of steel have ever appeared to have in them points that are not quite satisfactory; but it is probably owing to the fact that chemistry, throughout its whole range, is so replete with instances in which extraordinary effects or phenomena follow from insignificant causes, or from causes apparently inadequate to produce them, that this instance of the alleged composition of steel has been allowed hitherto to pass unquestioned generally.

The magical effect (as seen in its assumption of properties so singular and distinctive) of the addition to pure iron of some apparently insignificant proportion of carbon, is a conspicuous instance of this kind of chemical anomaly. That simple combination is, and has ever been alleged to be the sole cause of the conversion of the iron into steel. Carbon has been the only tangible or apparent element brought into contact with the iron in the act of its conversion; and after analysis of steel has detected in it, or assigned to it as essential, the existence of iron and carbon only. Therefore, has this explanation ever been generally accepted without misgivings; and, solely to this simple combination, has ever been, and still is, attributed the conversion and consequent assumption by the iron, when it becomes steel, of properties so distinctive and peculiar. Still the broad distinctions that exist in their mechanical or physical properties between steel on the one hand and malleable iron, or cast iron, on the other, would seem to leave room for great doubt that the cause of these distinctions is due solely to the absence in the one and the presence in the other of the element carbon, or to the merely minute differences in the relative proportions of that element that are found in steel and in cast iron; yet everywhere is this the received formula of the composition of steel, namely: that it consists solely of about 99 parts of pure iron combined with one part of carbon; and any other matters that, in extremely minute proportions, analysis may have from time to time, or occasionally, detected in it, have been considered as foreign and accidental only, and as being in no way essential to, but rather as interfering with its true chemical composition and character. In this light, for example, have been looked upon the minute proportions of manganese found in some descriptions of steel, and also the appearance of nitrogen developed during analytical operations. The former (howsoever its presence may be considered to modify some mechanical property

of the steel) has never been deemed essential to its chemical composition when the steel is in its normal or pure state; whilst the latter has ever been held (when recognised or detected at all) as the result of some merely mechanical adherence of that element to the metal, or to have been derived from the reagents present on analysis. The same reasoning has been applied to some other (so-called) foreign or accidentally present matters; and steel has, consequently, ever since the doctrines of modern chemistry begun to be applied in reasoning upon it, been looked upon as simply a compound of iron and of carbon, and as such, and such only, it would appear to be held even up to the present hour.

The same chemical doctrine of composition has always influenced, and still continues to influence, the selection of materials to be used as re-agents in the formation of steel, or for the conversion of iron into steel. Hence, to effect this conversion it has ever been deemed needful only to bring heated iron in contact with carbon, or with some carbon compound, in order that the iron shall take up the one per cent. or thereabouts, considered as essential to steel; and hence, also, the selection of charcoal as this re-agent principally; and whenever other re-agents may have been taken and used as aids or substitutes, leather shavings, for example, this selection also has always been made on the same general principle that it was the carbon alone that was to be absorbed by the metal. It will be seen, however, that notwithstanding this guiding idea of the steel-makers, either accident alone or some theory of the quality of the carbon in these specially selected materials, has undesignedly led to the employment of the very elements along with the carbon that the production or the chemical composition of steel demands; and which other elements existing theory would either have altogether rejected, or certainly never have especially sought for. This is another instance in which inadvertent experiment alone has furnished the problem; and in which the chymist or the theorist learns his first lesson from the artisan, or obtains from him his most important data, upon which to apply the higher reasoning of his science.

Bearing in mind the broad facts as seen in the distinctive physical properties of steel and iron, and the unsatisfactory character of the carbon-percentage explanation of these remarkable distinctions, is it not possible that a careful examination of the daily operations used to produce steel may exhibit the existence of some other phenomena, or the action of some other elements playing as important a part, either in the operations or in the ultimate composition of the steel, as that heretofore supposed to be fulfilled by carbon alone?

He who would enter upon the experimental solution of a question of this kind must rejoice to have prepared to his hand so active and so magnificent a laboratory as that provided by the iron and steel manufactories and the workshops of this country. Let any one, with or without an implicit belief in the stereotyped and re-stereotyped doctrines of the encyclopedias, make a pilgrimage to Sheffield, and among the multifarious operations of the converting houses, and of the tool-makers, he will speedily discover enough to shake his faith in the old doctrine, and facts enough upon which to reason in search of a new one.

He will perceive, for one instance, that the old cementation process, the avowed object of which is to bring into and keep in contact highly heated iron and carbon, in order sim-



ply to effect a combination between these two, is by no means of the uncomplicated character such simple conditions would imply. He will find, too, among the higher and thinking classes of that busy world, a growing conviction of the insufficiency of the old theory—a conviction such as that which recently led Mr. Sanderson (one of the highest and most experienced of steel-makers) to state, in effect, that “the abstraction from cast metal, containing five per cent. of carbon, of four-fifths of that quantity, does not necessarily result in the conversion of that iron into steel, and that the abstraction from pig or cast iron of the entire quantity of the carbon proper to cast metal, does not result in the conversion of the cast into malleable iron.” In other words, in this statement of one ever surrounded with practical evidences, and habituated to the considerations they lead to, we have it given, as the result of such considerations, that the notion generally entertained is an erroneous one—that steel is merely iron combined with about one per cent. of carbon, and that malleable iron is merely iron without any carbon at all, or with less carbon than that requisite to form steel.

It would appear that in this quarter, as well as in others, there exists a clear impression that the relation between the proportions of iron and carbon is not the only thing that determines the character of the metal; that there is something beyond this upon which the distinctive properties peculiar to cast metal, peculiar to malleable iron, and peculiar to steel, respectively depend—that, superimposed upon this merely chemical constitution, this adjustment of relative proportions of elements, there exists a something to which, equally with such adjustment, are due those physical properties that so remarkably distinguish these different kinds of iron. What, then, is this something? Is it some peculiar molecular arrangement or formation, or crystalline structure of the iron—some merely molecular arrangement of particles superinduced, permitted, or interfered with according to the presence or absence of other elements—that is, according to the purity or impurity of the metal? Is steel pure iron with just as much carbon in it as (conjoined to some molecular disposition of its particles) preserves it from external influences and change? or that subserves some purpose of conservation? Or is it the fact that there is combined with the iron, when it assumes the properties of steel, some other element besides carbon?

## II.—Varieties of Steel Proper, and of Iron Compounds that in some properties resemble Steel, and how best to distinguish these.

Before proceeding with my examination of already known circumstances under which iron is converted into steel, or steel into iron, or before instituting any special line of research for developing new facts upon which to reason as to the actual conditions and results, mechanical or chemical, of conversion, it is needful to define what steel really is physically—that is, what distinguishing properties it possesses, which, taken independently of its chemical composition, shall constitute an easy and incontrovertible test; or, in other words, shall enable us clearly to distinguish steel proper from iron compounds, or alloys of iron with other metals, or mixture of iron with non-metallic elements, which in some respects resemble, but are not steel.

Steel is contradistinguished from all other compounds by its capability of receiving different degrees of hardness, and a degree of

hardness comparatively superior to any other metal; by its elasticity under certain kinds of treatment; its capability of receiving a fine and a peculiar polish; by its development of certain different colors under different degrees of heat, and by the permanency of the action upon it of induced magnetism. It is distinguished from pure iron by the complete absence in the latter of any one, or degrees of any one of the properties just enumerated. But there are compounds of iron that exhibit some but not the whole of the special properties of steel. The outer coating of common cast-iron, when “chilled,” or when the casting has been made in sand, is often as hard and as unscratchable by the file as the best tempered steel itself. There exist also alloys of iron (as of iron with manganese and with other metals, such as those that were investigated by Stoddart and Faraday,) that, in the property of hardness alone, are scarcely inferior to the finest steel; but in none of these special compounds are there associated the whole of the peculiar physical properties, the collection or series of which distinguish steel from any other substance. The peculiar effects in modifying its normal properties of an admixture with steel, or with pure iron, of phosphorus, sulphur, silicium, &c., are pretty well understood; but it is the varieties of steel, the results of admixtures with steel proper of non-converted iron, in various proportions, that constitute the real difficulties of discrimination, and for these there exists no special test.

Place in the hands of an experienced steel worker (a file-maker, a razor, a watch spring, a needle, or a surgical instrument maker for example) a piece of rough, black, and unworked steel, part of a bar of cast steel, for instance, and ask him what metal it is. He will not judge of it by its specific gravity, nor by application to it of nitric acid, or of any other chemical test, but will proceed, most probably, as follows: He will balance it on his hand, and, tapping it with a hammer, will bring out its “ring,” as he calls it, the peculiar intonation of which in steel, as compared with the tone of iron, is, to his practised ear, a specific and infallible test of kind, and almost exactly of quality. He will next make it red-hot and try how it “draws;” that is, by repeated blows, will elongate the bar, watching as he proceeds the texture of the metal, its adhesiveness, its flexibility, its indisposition to scale, and the character of the marks inflicted upon it by his hammer. When it is good upon which he is working the sharp-edged, well-defined impressions of his hammer’s face (so finely developed, indeed, as to reproduce even the grindstone lines that are left on the face of a recently ground hammer); but when it is with iron or bad steel that he is working, then the shapeless and ill-defined impressions that result give to his practised eye all the information he seeks for as to the real quality of the metal he is handling. Next he will try the temper of his forged specimen—heat it to some known degree, and, after dipping it in cold water, test its degree of hardness by the file. Still further, in proof, he will next fracture the forged and tempered specimen, and through its grain find another evidence of its character. If the fracture be a clean one, close-grained, compact and silvery, it is steel; if ragged, fibrous and leaden-hued, it is iron; or it will be one or other of these, with such intermediate gradations as correspond to all the differences in quality that lie between these two extremes. Next

he will polish its surface, and, gradually heating the specimen, he will, as the temperature rises, watch that peculiar arrangement of colors that, in their special brilliancy, are peculiar to real steel alone—the assumption, first, of various shades of yellow, deepening as the heat increases almost into brown, then successively into greenish blue, with pure blue, and into purple—upon which there follows another kind of change—a disruption of the constitution of the metal, to which is due that play of colors and the oxidation of the surface. Finally, as the *ne plus ultra* of his testings, he will proceed, probably, to forge out of his specimen a turning tool, or preferably a cold chisel, and then, with the latter, cutting for a while at a piece of cast-iron, will at once pronounce upon the kind and the quality of the metal, and the exact purposes to which it is best applicable. Now, from the nature of the case, the chemist must imitate or select from these practices of the handicraftsman (for there exists no special test), and the file test, after tempering, together with the color test, under high and different temperatures, affords sufficiently accurate tests for most of the purposes of the laboratory.

TO BE CONTINUED.

IS MARIETTA TO BE A SWITCHED-OFF TOWN?—It is well known that heavy subscriptions for the M. & C. R. R. have been made by the citizens of Washington county, on the condition that the road should pass *through* Marietta, and make the connection with the Baltimore & Ohio Railroad at a point on that road some twenty or thirty miles to the southeast of this place. This may ultimately be done; but the proposition at present is to build a road from Scott’s Landing to Parkersburg. At a meeting of the Directors of the B. & O. R. R., a communication was read from Noah L. Wilson, Esq., President of the M. & C. R. R., “referring to the incomplete condition of the connection between that road and the Parkersburg Branch of the Baltimore & Ohio Road, representing that it was liable to be suspended, either by a low stage of water in the Ohio or the closing of that river by ice in the winter, in which event we should be deprived of the advantages of that connection, and the Parkersburg Branch be rendered comparatively useless. To avoid this it is proposed to build a connecting road, nine miles in length, from Scott’s Landing, below Marietta, to Parkersburg. The road to cost \$200,000, and be located on either, or partly on each side of the Ohio river, as the Baltimore & Ohio Railroad Company may conclude. The communication asked the appointment of a committee to meet a similar committee appointed by the Marietta Road for the consideration of the subject.”

It may be, and probably is, for the interest of the M. & C. Road to make the proposed connection; and, as it is also for the interest of the people of Marietta that the road should prosper, they may, perhaps, be wise in acceding to such an arrangement for the present; but may not these men who have subscribed so liberally reasonably protest against such an arrangement as a permanent one? We have now, to be sure, the means of getting out to the world—a railroad comes to the place; but it is not difficult to see that we are not nearly as much benefitted by the road as we would be if it passed *through* the place and made direct connections on toward the East. —*Marietta Intelligencer.*



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds.	Name of Company.	Quot' of Stock.	Ln'h of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	0	.....	.....	1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp'sr	.....	173	6,000,000.00	.....	.....	.....	.....
498,800	6	.....	.....	1862-3	2d "	.....	Androsco'g'n & Kennebec	.....	54.55	1,400,000.00	.....	209,475.46	110,246.98	none.
199,060	7	July & Jan.	.....	.....	Domestic.	.....	Atlanta and LaGrange.	.....	86.5	1,000,000.00	199,000.00	274,123.74	173,780.74	4 pr. ct. 6m
52,616	0	.....	.....	now	"	.....	Eng'r, Old T. & Milford.	.....	12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53
500,000	7	.....	N. Y.	1866	1st mortgage.	.....	Boston & Worcester.	.....	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,662.03	180000 4.6m
500,000	7	.....	.....	1857-9-62	Income.	.....	Buffalo & State Line.	.....	.....	1,300,000.00	.....	.....	.....	5 pr. ct. 6m.
300,000	7	.....	.....	1864	Domestic.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
300,000	7	.....	.....	.....	4th mortgage.	30.	Central Ohio.	.....	.....	.....	.....	.....	.....	.....
577,187	6	.....	.....	1872	1st mortgage.	.....	Champl'n & St. Lawrence	.....	43	1,872,800.00	1,001,087.00	108,200.00	77,700.00	10 per ct.
192,200	7	.....	.....	1874	2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
380,000	7	.....	.....	.....	Domestic.	.....	Ch'r'l'te & South Carolina.	.....	110	1,750,000.00	380,000.00	291,219.86	47 per c't.	\$72,300
1,440,000	7	.....	N. Y.	86 4-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	.....	138	3,746,900.00	3,114,000.00	1,095,165.00	571,725.23	15 pr. ct. 6m
1,300,000	6-7-8	.....	.....	1863-9	2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
374,000	8	.....	.....	1868-76	Convertible.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
1,300,000	.....	.....	.....	.....	1st mortgage.	.....	Chicago, Fulton & Iowa.	.....	5.	.....	.....	.....	.....	.....
532,000	.....	.....	.....	.....	2d "	.....	Cin. Wil'ng'n & Zanes'ville	.....	13 1/2	1,761,149.16	2,241,500.00	221,491.96	.....	.....
104,000	.....	.....	.....	.....	3d "	.....	" " "	.....	25	.....	.....	.....	.....	.....
305,500	.....	.....	.....	.....	Income.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
540,000	6	.....	.....	.....	Convertible.	.....	Cleveland Col. & Cin.	103 1/2	139	4,741,320.00	.....	1 3,754	700,804	6 per cent.
49,000	7	.....	.....	1873	1st mortgage.	.....	Cleveland & Mahoning.	.....	85	1,500,000.00	.....	.....	.....	.....
400,000	7	.....	.....	1864	2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
500,000	7	.....	.....	1873	.....	.....	Cumberland Valley.	.....	52	1,218,300.00	.....	169,511.56	81,101.56	\$33,250.24
500,000	6	.....	.....	1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00	.....	.....	.....
350,000	7	.....	.....	.....	1st "	.....	Eastern Railroad.	53 6-10	.....	3,345,900.00	.....	665,578.79	288,078.84	\$234,133
740,000	7	.....	.....	.....	2d "	.....	East Ten. & Virginia.	130	.....	625,450.00	.....	30,897.30	19,692.30	.....
88,000	10	.....	.....	1869	.....	.....	Essex Railroad.	20	.....	700,000.00	.....	.....	.....	.....
400,000	7	.....	.....	1861	1st "	.....	Evansville & Crawf'd'vle	109	.....	2,228,657.50	.....	243,970.42	136,061.90	\$133,281.45
200,000	10	.....	.....	1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,540,000.00	.....	681,162.52	213,537.81	3 pr. cent.
100,000	6	.....	.....	.....	1st "	.....	Fox River Valley.	33	.....	800,000.00	.....	.....	.....	.....
100,000	6	.....	.....	.....	1st "	.....	Fair Haven Branch.	15	.....	300,000.00	.....	50,381.33	14,822.45	\$166,240.00
300,000	6	.....	.....	.....	1st "	.....	Georgia RR & Banking Co	233	.....	4,156,000.00	.....	1,068,202.54	357,689.42	\$166,240.00
4,000,000	6 1-9	.....	.....	1858	1st "	.....	G't'r Falls & Conway R.R.	30	.....	.....	.....	27,576.69	14,207.07	8 pr. ct.
2,000,000	7	.....	.....	1869-70	1st "	.....	G't'r West'n R.R. of Can.	28 1/2	.....	4,191,550.00	.....	2,068,836.00	.....	.....
1,812,000	7	.....	.....	1860	2d "	97 1/2	Housatonic Railroad.	74	.....	2,000,000.00	.....	339,196.50	176,529.95	.....
12,885,000	7	.....	.....	1875	3d mortgage.	58	Hudson River.	22	144	4,000,000.00	.....	1,924,382.44	718,037.40	.....
4,115,000	7	.....	.....	1875	1st "	99 1/2	" " "	144	144	4,000,000.00	.....	.....	.....	.....
3,000,000	7	.....	.....	1860	Freeland.	64 1/2	Illinois Central R. R.	117 1/2	704	18,453,376.00	.....	1,476,035.27	1031,489.08	7 pr. ct.
600,000	7	Nov. 1.	.....	.....	1st mortgage.	80.	Indiana Central.	48	72 1/2	3,558,376.00	.....	354,671.00	.....	3 pr. ct.
700,000	7	Jan. & July 1	.....	1862	2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
50,000	7	.....	.....	.....	1st mortgage.	.....	Iron R. R.	13	.....	123,700.00	.....	.....	.....	.....
700,000	7	.....	.....	.....	1st "	.....	Kentucky Cen. 2d Div.	.....	.....	719,500.00	.....	.....	.....	.....
218,000	7	.....	.....	.....	1st "	.....	Knoxville & Kentucky.	32	.....	166,000.00	.....	23,233.59	14,233.59	.....
1,000,000	7	.....	.....	1866	2d "	.....	Laurens (S. C.) R. R.	184	.....	300,000.00	.....	50,234.71	14,149.13	\$5,000
1,000,000	7	.....	.....	1875	2d "	.....	Louisville & Nashville.	12 3/5	.....	2,697,090.00	.....	587,236.57	.....	10 pr. ct
2,000,000	6	.....	.....	.....	1st "	.....	Lowell & Lawrence	15	.....	2,697,090.00	.....	.....	162,277.50	.....
2,500,000	7	.....	.....	1868	1st "	.....	Mad River & Lake Erie.	26	.....	1,000,000.00	.....	.....	.....	\$24,000
2,000,000	7	.....	.....	1874	2d "	50.	Manchester & Lawrence.	17 1/2	.....	.....	.....	.....	.....	.....
60,000	7 and 8	.....	.....	1867	1st "	.....	Marletta & Cincinnati.	.....	.....	.....	.....	.....	.....	.....
420,000	8	.....	.....	.....	1st "	.....	Mobile & Ohio.	497	.....	10,000,000.00	.....	253,498.96	162,802.84	.....
320,000	8	.....	.....	1881	1st mortgage.	.....	Nashua & Lowell R. R.	15	.....	600,000.00	.....	194,752.42	55,501.74	7 pr. ct.
320,000	8	.....	.....	1-68	1st "	.....	New Haven & North'n'tn	55	.....	922,500.00	.....	.....	.....	2 pr. ct. 6m
6,000,000	6	.....	.....	1884	1st "	.....	New York Central.	85 1/2	555	23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
500,000	7	.....	N. York	1864	Con. till 1859.	99	N. Y. & Harlem R. R.	10 1/2	133	6,717,100.00	.....	1,040,393.26	64,678.71	\$37,692.30
2,356,000	7	May & Nov.	N. York	1873	1st mortgage.	84 1/2	" " " Pref.	25	.....	1,58,000.00	.....	245,713.00	51,544.40	.....
8,832,600	6	June & Dec.	N. York	1863	1st "	.....	N. Y., Prov. & Boston.	50	.....	1,700,000.00	.....	120,571.50	.....	.....
3,000,000	7	.....	.....	.....	2d "	.....	N. Lon., William'uta & Pal.	66	.....	.....	.....	.....	.....	\$25,000
936,000	6	.....	.....	.....	1st "	.....	Pontchartrain R. R.	5	.....	500,000.00	.....	.....	.....	.....
411,700	6	.....	.....	.....	1st "	.....	N. O., Opel'os & Gr't West.	62 1/2	.....	600,000.00	.....	116,795.00	366,118.50	7 pr. ct.
500,000	7	.....	.....	.....	1st "	.....	N. Y. & New Haven.	103 1/2	.....	3,000,000.00	.....	1,007,666.48	.....	.....
300,000	6	.....	.....	.....	1st mortgage.	.....	North Western Va. R. R.	.....	.....	.....	.....	.....	.....	7 pr. ct.
1,500,000	6	.....	.....	1873	2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
2,000,000	6	.....	.....	1875	3d "	.....	Northern (N. Y.) R. R.	118	.....	2,000,000.00	.....	600,000.00	.....	.....
1,500,000	7	.....	.....	1859	1st mortgage.	.....	North Missouri R. R.	19 1/2	.....	.....	.....	23,176.74	88,458.56	2 1/2 pr. ct.
2,000,000	5	.....	.....	.....	1st mo g	.....	Norwich & Worcester RR	60	.....	2,111,500.00	.....	304,236.33	.....	.....
419,300	6	.....	.....	1877	.....	.....	Ogd'nsh'g. Clay't'n & Rome	.....	.....	.....	.....	.....	.....	5 pr. ct.
221,800	6	.....	.....	1860	.....	.....	Ontario, Simcoe & Huron	94	.....	.....	.....	289,690.10	137,875.93	.....
400,000	6	.....	.....	.....	1st mortgage.	.....	Orange & Alexandria R.R.	83 3/4	.....	2,957,500.00	.....	276,539.02	.....	.....
1,200,000	6	.....	.....	1866	2d mortgage.	.....	Peoria & Bureau Val. R. R.	47	.....	1,500,000.00	.....	.....	.....	6 pr. ct.
300,000	7	.....	.....	1875	1st "	.....	Philadelphia & Trenton.	28 1-5	.....	1,000,000.00	.....	.....	.....	.....
300,000	8	.....	.....	1868	1st mortgage.	.....	Portsmouth & Concord.	47	.....	.....	.....	.....	.....	.....
300,000	8	.....	.....	1872	1st "	.....	Potsdam & Watertown.	76	.....	2,000,000.00	.....	68,525.42	.....	.....
250,000	6	.....	.....	.....	1st "	.....	Rutland & Washington.	62 1/2	.....	950,000.00	.....	.....	.....	.....
800,000	7	.....	.....	.....	1st mortgage.	.....	St. Louis & Iron Moun. R.R.	86	.....	6,000,000.00	.....	.....	.....	.....
1,200,000	0	.....	.....	20 years.	1st mortgage.	.....	Salem & St. Louis R. R.	168 1/2	.....	400,000.00	.....	.....	.....	.....
500,000	6	.....	.....	.....	1st "	.....	Snd'sky, Mans'd & New'k	116	.....	.....	.....	.....	19,050.64	.....
250,000	6	.....	.....	.....	2d "	.....	Sullivan Railroad.	26	.....	500,000.00	.....	75,246.06	17,378.08	.....
377,000	.....	.....	.....	.....	1st mortgage.	.....	Tennessee & Alabama.	145	.....	.....	.....	39,586.44	.....	11m. 1 pr. ct
300,000	7	.....	.....	1861	1st mortgage.	.....	Terre Haute & Richmond	73	.....	1,294,450.00	.....	.....	.....	.....
198,000	7	.....	.....	1840	2d "	.....	Toledo, Wabash & Western	242	.....	1,000,000.00	.....	.....	.....	.....
292,500	7	.....	.....	1875	3d "	.....	Troy & Boston.	.....	.....	.....	.....	.....	.....	.....
2,500,000	.....	.....	.....	.....	1st, 2d, 3d "	.....	Vicksburg & Jackson.	46	.....	.....	.....	.....	165,076.04	2 pr. ct.
596,000	7	.....	.....	.....	1st mortgage.	.....	Virginia & Tennessee.	215	.....	3,000,000.00	.....	322,048.60	.....	.....
200,000	7	.....	.....	.....	2d "	.....	Westchester (Pa.) R. R.	31	.....	165,000.00	.....	.....	.....	.....
.....	.....	.....	.....	.....	1st mortgage.	.....	Wilmington & Manchester	171	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	2d "	.....	Winchester & Potomac.	32	.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....	.....	Worcester & Nashua.	45 69.	.....	.....	.....	.....	.....	.....



June 20th, 1857.

THE HEMPFIELD ROAD.—The action taken by the Stockholders of the Hempfield road at their late meeting in Washington, Pa., argues very favorably for that road in the future. There was a large vote of stock present—over 23,000 votes were cast—all of which were voted for the acceptance of the loan authorizing the Board to issue the preferred stock, which, with the arrangements made, will, almost beyond doubt, insure the completion of the road to Washington within the next sixty days. This, of course, will help the business interests of the city, and will help no little the business of the road. But it will do more—it will give some sort of name,—some sort of notoriety to the road. It will be looked at more at the East by Railroad men, and the advantages of carrying it on to Greensburg will be brought prominently up in the discussion of every stock board, in the Eastern cities. We believe that the action of Thursday will put the Hemdfield clear through.



## PACIFIC RAILROAD.

WASHINGTON, July 15, 1857.

To the Editor of the Union :

DEAR SIR : Absence from Washington has prevented my asking at an earlier day your correction of certain errors in a notice that appeared in your paper of the 16th of June of Captain Whipple's report upon his exploration of a route for a Pacific railroad, near the 35th parallel. Great praise is justly awarded to that officer, in the notice, for the industry and skill with which the various operations under his charge were conducted ; but his report and that of the Secretary of War comparing the different routes have been misapprehended in some particulars. The statements respecting the route of the 35th parallel, contained in the report of the Secretary, were based upon the first or preliminary report of Captain Whipple, which was published in connection with that of the Secretary of War. The report of the latter is quoted as stating the length of the route along the 35th parallel from Fort Smith to San Pedro to be 1,892 miles, the extension to San Francisco 406 miles ; total distance 2,298 miles ; and it is remarked, "this made the middle route (that of the 35th parallel) 230 miles longer than the El Paso route, and more than eighty-two millions of dollars the costliest ! Now, this was a sad mistake. By referring to volume 4, page 288, now nearly ready for publication, it will be seen that the measured distance from Fort Smith to San Francisco is only 1,952 miles.

"The El Paso route, instead of being 230 miles shorter, is in fact 116 miles longer than the middle route. So with the cost. Instead of being more than eighty-two millions of dollars the *cheapest*, the El Paso route is in fact more than two hundred thousand dollars *dearer* than the middle route."

This is not a mistake of the Secretary of War, but a misapprehension on the part of the writer of the notice.

The language of the Secretary is "Branch road to San Francisco, from the Mohave river, 406 miles ;" and this distance added to the length of the route up to the point of leaving the Mohave river (1,768 miles) gives 2,174 miles as the total length of the direct route from Fort Smith to San Francisco, as obtained from the report of the Secretary of War.

The distance from Fort Smith to San Francisco, of 1,952 miles, is not, as the writer has supposed, measured on the ground ; nor does it pass through San Pedro, nor touch at any seaport before reaching San Francisco, but proceeds direct to that city from the Mohave river.

The length of this route, as just stated, taken from the Secretary's report, founded upon the first or preliminary report of Captain Whipple, is 2,174 miles ; the length taken from Captain Whipple's *second* report is 1,952 miles.

A large part of this reduction of distance rests upon conclusions respecting the practicability of a cut-off from the Big Sandy river to the Colorado river by a line across a country very generally rugged, which conclusions were derived from a study in the office of the field-notes—no portion of the line having been actually traversed ; but, as it does not appear from either report that any idea as to the practicability of the line was entertained during the examinations in the field, nor the existence of such a line surmised at that time, it can only be considered as one which

further examinations may show to be practicable, and not one to be absolutely adopted as such, and the cost of a railroad along it elaborately estimated for. This will be shown in the official review of Capt. Whipple's second report.

When the publication of the Pacific railroad reports is finished, it will be found that this mode of locating a railroad line has not been approved by the War Department, and that, so far as yet demonstrated, the length of the route of the 35th parallel from Fort Smith to San Francisco is not less than 2,090 miles ; that \$106,000,000 is probably an under-estimate of the cost, and that the distance from the Mississippi river to San Francisco by the same route is 2,360 miles ; and it will likewise be found that the distance from Fort Smith to San Pedro by the same route is at least 1,820 miles, and the estimated cost of the railroad not less than \$92,000,000 ; the distance from the Mississippi river to San Pedro by the same route being 2,090 miles.

Should the cut-off from the Big Sandy to the Colorado be found practicable, and greatest possible saving of distance be obtained, then the length of the route from Fort Smith to San Francisco may be reduced to 2,000 miles, with a cost of not less than \$100,000,000 ; and the distance from the Mississippi river to San Francisco by the same route may be reduced to 2,270 miles. Under the same contingency the distance from Fort Smith to San Pedro may become 1,730 miles, the cost of the railroad not less than \$86,000,000, and the distance from the Mississippi river to San Pedro 2,090 miles.

It is further stated in your paper that the measured distance, as given in Capt. Whipple's report, from "Fort Smith to San Pedro, on the Pacific ocean, is 1,672 miles and eight-tenths of a mile." The report has been misapprehended. This distance is not measured on the ground, but is only the sum of the distances measured on the map from camp to camp, on straight lines, and is about one-tenth less than the actual distance measured, or than the traveling distance, or than the length of any rail or wagon-road that could be built between those two points, following the route pursued by Capt. Whipple's party.

The distances from Fort Smith, and Fulton to the Mississippi river by railroads building and projected, measured on the railroad maps, are respectively, 270 and 150 miles.

For the route of the 32d parallel, we have from Fulton to San Diego 1,548 miles ; estimated cost of railroad \$69,000,000 ; and distance from the Mississippi river to San Diego, 1,698 miles.

From Fulton to San Pedro, 1,618 miles ; estimated cost of railroad, \$69,000,000 and distance from the Mississippi river to San Pedro, 1,760 miles.

From Fulton to San Francisco, 2,040 ; estimated cost of railroad, \$93,000,000, and distance from the Mississippi river, to San Francisco, 2,190 miles.

It would therefore, appear from all that has yet been measured, or demonstrated as certain, and even allowing all the possible reductions, in the lengths of the other routes, that may result from future surveys, that the route of the 32d parallel is, in the language used by Secretary Davis in his report to Congress, "the most practicable and economical route for a railroad from the Mississippi river to the Pacific ocean," and "not only is this the shortest and least costly route to the Pacific, but it is the shortest and cheapest

route to San Francisco, the greatest commercial city on our western coast."

Further, the great belt of uncultivable country over which all the routes must pass is crossed by the route of 32d parallel on the shortest line.

It is probable, from various indications, that eastern limit of the uncultivable region is found further west on the route of the 32d parallel than on any other ; but setting this aside, until it is fully demonstrated, and assuming the arid district to begin on all the routes at the 99th meridian, we have from that meridian to the Pacific slopes (the western limit of the uncultivable region) :

By the route of the 32d parallel—  
To the summit of Warner's Pass 1,160 miles.

" " San Geronio Pass 1,218 "

By the route of the 35th parallel—

To the summit of the Cajon Pass 1,400 "

" " Taheechaypah Pass 1,450 "

Thus the distance across the uncultivable region is, on the route of the 32d parallel, 230 miles shorter than on the route of the 35th parallel.

But the analysis of the soil of a large part of the Colorado desert shows it to be composed of fertile constituents, needing only water to be highly productive ; and as it lies below the level of the Colorado river, works of irrigation on a scale similar to those now in progress in India (by which already large districts heretofore deserts have been converted into productive lands) would bring into cultivation an area greater than that of the land under cultivation on the Mississippi river, between the mouth of Red river and the Balize ; with a soil that would rival in its productions the best lands of the Delta of the Mississippi.

It will not, then, be considered extravagant to assume that the great uncultivable belt may be made to terminate at the Colorado river, on the route of the 32d parallel, and thus the distance across it, on that latitude, become from 350 to 400 miles shorter than on the route of the 35th parallel.

Subjoined is a table exhibiting the comparative lengths, &c., of the two routes.

Very respectfully, your obedient servant.

A. A. HUMPHREYS,  
Capt. Top. Eng'rs

## Comparison of the routes of the 35th and 32d parallels ;

35th parallel, from Fort Smith to San Pedro. Length, 1,820 miles. Cost, \$92,000,000. Length across the uncultivated region, 1,400 miles.

35th parallel, from Mississippi river to San Pedro. Length, 2,090 miles.

35th parallel, from Fort Smith to San Francisco. Length, 2,090 miles. Cost, \$106,000,000. Length across the uncultivated region, 1,400 miles.

35th parallel from Mississippi river to San Francisco. Length, 2,360 miles.

32d parallel, from Fulton to San Diego. Length, 1,548 miles. Cost, \$69,000,000. Length across the uncultivated region, 1,160 miles.

32d parallel, from Mississippi river to San Diego. Length, 1,698 miles.

32d parallel, from Fulton to San Pedro. Length, 1,618 miles. Cost, \$69,000,000. Length across the uncultivated region, 1,218 miles.

32d parallel, from Mississippi river to San Pedro. Length, 1,760 miles.

32d parallel, from Fulton to San Francisco. Length, 2,040 miles. Cost, \$93,000,000. Length across the uncultivated region, 1,218 miles.

32d parallel, from Mississippi river to San Francisco. Length, 2,190 miles.

## LEHIGH VALLEY R. R.—The earnings of the Lehigh Valley Railroad for the month of

June, 1857, were.....\$48,358 42  
June, 1856, " ..... 21,334 05

Increase (equal to 126 per cent.)....\$26,924 37



### THE GREAT ATLANTIC TELEGRAPH—THE SUBMARINE CABLE.

At our last dates from England, the preparations for this grand international enterprise were rapidly approaching completion, and it was thought that by the close of July, the *Agamemnon* and the *Niagara* would be able to commence depositing in the Atlantic, the cables which are to constitute a daily and hourly means of communication between the Old World and the New. Both these vessels were far advanced in the work of shipping the cable; one at Birkenhead, where Messrs Newhall & Co., are under contract to supply one-half the entire length, and the other a little below Greenwich Hospital, where the other half is being supplied from the works of Messrs. Glass, Elliott, & Co., of East Greenwich. Each firm has undertaken to furnish twelve hundred and fifty miles, and the total distance from shore to shore being nineteen hundred statute miles, there will of course be a surplus of six hundred miles—a margin which is believed to be amply sufficient to provide for all exigencies and contingencies which it is reasonable to anticipate.

The London Daily News gives the following sketch of the scene at the works of Messrs. Glass, & Co., and on board the *Agamemnon*:

On entering the manufactory, one is conducted to a room in which the electric wires, seven in number, are seen, encased in three coatings of gutta percha, as received from the works of the Gutta Percha Company, in the City road. Here the casing, with the aid of a serving machine, receives a covering of tarred yarn, after which it is accumulated on a large drum. Thence it is conveyed, by the action of machinery, to a number of bobbins, which are fixed to a rotary machine, called the closing machine, and being drawn upwards it receives a final casing of iron wires, which meeting in a narrow aperture, are twisted round it at the meeting point. There are five of these closing machines constantly at work day and night, and the whole complete about twenty miles a day. After this process, the cable is passed through a tar tank, the heat of which is regulated by a thermometer, and being afterwards cleaned by means of a brush, it is then formed into huge coils, preparatory, to its being passed to the *Agamemnon*, a work which is in constant operation.

That part of the cable which is intended for the shore ends is, as usual, of extra thickness. On the Irish side of the Atlantic this portion will be about 25 miles long. On the Newfoundland coast, where the ocean becomes deep almost immediately, it will be only about 5 miles. On both sides, however, the diminution of diameter is to be affected gradually, so as to avoid any mechanical danger connected with the laws of pressure. It may here be observed that the greatest pains will be taken, with the concurrence and co-operation of the Admiralty, to prevent injury near the coast from the anchors of vessels and other similar causes, for which purpose the Admiralty charts will be made to include the course of the electric cable, and buoys will be fixed at proper intervals. One of the most interesting features in the process of manufacture is the joining of the wires, which takes place about every 2,000 yards. Such is the effect of the process adopted, that in case the cable be broken by a current or otherwise, one wire would remain uninjured, and communication would not be interrupted. The metal would

spring, and the electric current might still be conducted.

Nothing could be more beautiful than the welding process in the joining of the cable. The beveled parts of the wire having been united, thin strips of gutta percha are wrapped over, and welded with the aid of a flame of vaporized naphtha; these are ultimately covered with a thin coating of the same material, and, in order to strengthen the cohesion between the old and new gutta percha at the point of junction, a portion of the latter is afterwards cut off, prior to its being welded with the former, which is warmed, as before indicated, for that purpose. After witnessing the operation, it is impossible to doubt that the cementation is perfect. This point is of the more importance, inasmuch as fears have been expressed as to the practicability of effecting a perfect union in the middle of the Atlantic, where, according to present arrangements the *Agamemnon* and the *Niagara* are to part company, the former to return to this country and the latter to convey her portion of the cable to Newfoundland. If the welding, or junction, be as simple and facile a matter—and there is no apparent reason why it should not—in mid-ocean as at the manufactory, five minutes will suffice to tie the international knot.

The prospect of a successful junction, where these two vessels are respectively to begin and finish their task, has been rendered more secure, by an ingenious contrivance just invented by a German mechanic of the higher class, the object being to obviate the strain which might be expected to occur. It consists of the use of two eyes that interlock each other, and the result will be, that whatever strain there may be, will be entirely diverted from the cable. On board the *Agamemnon*, the cable, by means of a donkey engine, is drawn upon the upper deck, at the rate of three and a half miles an hour; the average rate at which it is delivered, after allowing for unavoidable stoppages, being two and a quarter miles an hour, or fifty-four miles a day, night forming no interruption. The total quantity of cable to be received, is twelve hundred and fifty miles. Each coil at the centre, forms a length of about five and a quarter miles, and the weight of the cable is about one ton per mile. It was expected the whole would be on board by the 20th instant, and that on the 25 the *Agamemnon* would proceed to Cork, to join the *Niagara*. The operations at Greenwich, as we learn from the London News, are under the active superintendence of Dr. Whitehouse and Professor Morse. These gentlemen were doing all in their power, to ensure success to the enterprise. The liveliest interest will be felt for the result of this great experiment.—*Philadelphia Enquirer*.

### RAILROAD FARES.

We copy the following sensible article on this subject from the *New York Courier and Enquirer*.

The Railroad interest is one of the most important at the present time: and is destined to exert a more powerful influence than heretofore, upon the great commercial, manufacturing, and agricultural interests of this country—indeed of the whole world. Absorbing seven hundred millions of dollars of capital in bringing the system to its present condition, and requiring prospectively the employment of many millions more, we find that

investments in railroad shares, as a general result, pay less than almost any other. At the same time, many railroad corporations have passed into bankruptcy with a total loss of capital; others are in financial difficulties not being able to pay the interest on their floating debts; and others obviously cannot cover their running expenses with their receipts.

The cause of such financial troubles would, by merchants of ordinary sagacity, be promptly remedied. It lies in doing business *too cheaply*—in affording too much, or too many accommodations to the public for the money paid therefor. The remedy obviously, is to charge more for the services rendered; and thus according to all sound rules of finance, furnish an appropriate remuneration to the capitalists for their outlay.

It is well known to many railroad men, that the system of cheap fares was fully tested in Massachusetts, and with all the advantages resulting from sagacity, prudence, economical management, close insight into details, the system was found utterly defective. On examining with some care the elaborate and comprehensive reports of the Boston and Worcester Railroad Corporation for the years 1855 and 1856, we find that they have applied the true remedy for defective revenues. The company have had the benefit of economical management—the interest on their bonded and floating debts not exceeding six per cent. annually, yet for some years they found their receipts did not pay well for their expenditures. Even at two cents per mile for each passenger in 1853 the revenue was insufficient, and the rates have been advanced, viz:

	Year 1854.	1855.	1856.
Receipts per passenger per mile.....	2	2.15	2.29.

Even at the average rate now charged, 2.29 100, the road could not, except under favorable circumstances, pay their shareholders. If the Company were subjected to 1 or 1½ per cent. per month for interest (or 24½ as is the case in New York,) a serious inroad would be made in their surplus income. The revenue and running expenses of the Boston and Worcester road for the past ten years were as follows.

Year.	Total Income.	Working Expenses.	Per centage of working expenses to Revenue.
1847.....	\$722,000	\$382,000	53
1848.....	716,000	382,000	53.3
1849.....	703,000	405,000	57.6
1850.....	757,000	377,000	49.8
1851.....	743,000	394,000	53
1852.....	758,000	410,000	54
1853.....	887,000	455,000	61.3
1854.....	952,000	594,000	64.5
1855.....	1,008,000	603,000	59
1856.....	1,108,000	671,000	60.6

It requires no spirit of prophecy to predict, that the merchant who daily purchases merchandise at a dollar and sells it at ninety-five cents, must inevitably become bankrupt! And yet this is precisely what the Railroad Directors of the United States, are constantly doing; and then the innocents! hold up their hands in holy horror at the difficulties by which they are surrounded. We are well aware that in this State there are restraining laws as regard the maximum prices to be charged for passengers per mile; but we also know, as does every intelligent Railroad Director in the State or in the United States, that these laws can be changed on application; and therefore we say it is not *honest* to pretend that the law stands in the way of demanding remunerative prices for the work done.

The amount of capital invested in American Railways exceeds seven hundred millions of dollars; and this enormous sum is rendered



comparatively valueless to its owners, through the mismanagement of those to whom it is entrusted. This is strong language; but it is nevertheless the simple truth. The Railroad Directors of the United States, and they only, are responsible for the melancholy fact, that this enormous pecuniary interest does not yield a remunerative revenue; and we have no hesitation in saying, that if stockholders will not make use of the power they possess, and compel their Directors to raise the fare to a remunerative price or turn them out of office, they do not merit the sympathies of the public. We have no patience with men who thus misrepresent the interests of their constituents, nor with constituencies who tamely submit to be thus treated by their servants. They are entitled to no sympathy, except indeed, in the cases of widows and orphans who thus have their means of subsistence taken from them by the very men selected to watch over their interests. But in common with all who have the welfare of our country at heart, we deeply deplore the folly and infatuation of men, who, to gratify some foolish spirit of rivalry, day after day, deliberately persevere in a policy absolutely ruinous to the great Railroad interest of the country, and indirectly seriously affecting our national prosperity, by rendering unavailing it not valueless, upwards of seven hundred millions of capital.

Our experience, and it is not a limited one, warrants our saying, that ninety-nine out of every hundred of the intelligent people of the United States, condemn the system now adopted by the Railroad Directors, and will cheerfully submit to have the price of railroad traveling increased to any rate which will be found remunerative. What that rate may be, we are not prepared to say; but this we know: If the stockholders of the Erie, Hudson River, and Central Railroads, were to demand of their Directors not to carry passengers for less than two and a half cents per mile, the seventy-five millions of dollars invested in those roads, would at once become productive, and all good men would rejoice in their prosperity and the influence of that prosperity upon the country at large.

Public opinion is sound upon this subject; and we but reflect public opinion when we say to Railroad Boards—"raise your fare or abide the consequences; and just so long as your Stockholders will tamely submit to your existing very foolish proceedings, neither they nor you, are deserving of public sympathy. You have the remedy in your own hands, and if you will not use it you must abide the consequences. If your Stockholders insist upon being ruined, why so be it; but if they would reap the legitimate fruits of their enterprise, they must either get rid of you at once, or compel you to be alike just to them and to the country."

The Stockholders of a Railroad who permit their Board of Directors to continue its fares at less than two cents and a half a mile, deserve to be without dividends and have their roads brought to the hammer; and we at least, have no sympathies to waste upon them.

[From the Columbus Sun]

#### MOBILE AND GIRARD RAILROAD.

GIRARD, Ala., July 1, 1857.

The annual meeting of the Stockholders of the Mobile and Girard Railroad Company was held on Wednesday, 1st inst., at the Depot in Girard. This body was organized by calling Capt. JAMES ABERCROMBIE to the Chair, and

the appointment of HUGH B. DAWSON as Secretary. The regular annual report of the President and Treasurer was, on motion, read by the President himself. By an examination of this report it will be seen that the road is in a much better condition than the embarrassment and difficulties (financial and otherwise) under which it has labored from its very commencement until now, would allow any of its most sanguine friends to believe or hope. It is now finished and in good running order from Girard to Gurreyton, a distance of thirty-eight miles. The present condition and prospects of the road certainly reflect the highest credit upon the indefatigable President and Board of Directors, and encourages us confidently to expect that under so able an administration it will progress rapidly and surely to a final completion.

The following named gentlemen were unanimously elected Directors for the ensuing year: John H. Howard, Dr. Thomas H. Dawson, Thomas P. F. Threewits, James Gachet, Arnold Seale, Homer Blackman and Henry H. Epping.

The above proceedings published by authority of the Board.

JAS. ABERCROMBIE, Ch'n.

HUGH B. DAWSON, Sec'y.

COAL TRADE. — The Pottsville Miners' Journal, says:

"The demand for the best quality of coal is fair—second quality is dull and prices below the cost of production. The trade for the week sums up as follows, compared with last year:

	1856.	1857.	Loss.	Gain
Schuylkill Railroad...	49,282	40,630	8,652	.....
"    Canal.....	32,103	41,746	.....	9,643
Lehigh Canal.....	33,186	36,207	6,979	.....
"    Railroad.....	3,172	11,505	.....	8,333
Del. and Hudson Co.	21,093	20,214	879	.....
Penn. Coal Co.....	28,312	28,593	281	.....
Scranton.....	964	6,588	.....	5,624
	178,112	185,413	16,510	23,811
		178,112		16,510
Gain for the week.....	7,301			7,301

Making a total gain this year so far, from the above regions, including the winter supply by all the Railroads, only 61,792 tons, with only about four months of the shipping season by Canal remaining.

Prices of coal remain without change in this region. Freight has advanced to \$1.70, and vessels continue scarce at Port Richmond to the East—while at the same time there is more shipping lying idle at New York, than has occurred since 1840, when the commerce of the country was to flourish under the beautiful system of free trade, inaugurated by the sapient rulers at Washington. Limiting freights below a paying point, has done the business.

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

July 23-1m

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
febl9-1m 9 South William street, N. Y.

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
July 30 No. 66 Broadway, N. Y.

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. July 29-2m

## SILVER, GOLD, LEAD, And Other Minerals,

### ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TURAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Agent for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route. FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

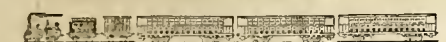
WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent.

1010 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	4½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	20 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Luevald, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jyl7

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call at orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnbuses L

Office No. 2 Burnet House.

Jan2

1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:20, 4 and 6:20 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities. Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M. INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M. MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburgh, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via. Clyde through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

If Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:20 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:20 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8 A. M. and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 6:15 and 10:25 P. M.

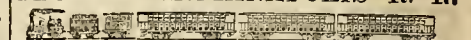
For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnbuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash, and Western Road for Lago, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T., W., & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

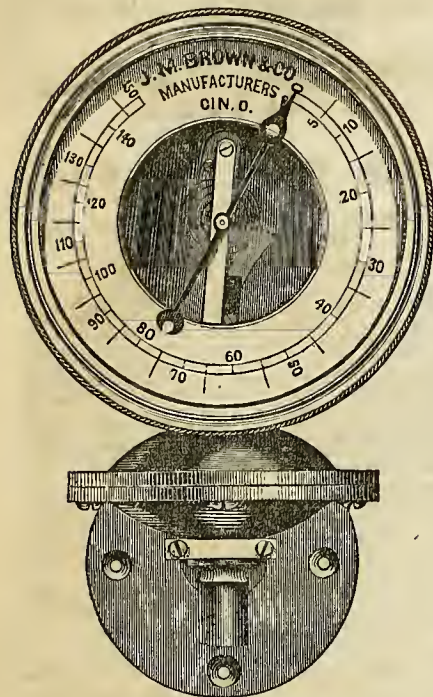
L. N. ANDREWS, Gen. Frtght. Ag't.  
Indianapolis, Sept. 16, 1856.

[mh29-ly.



# M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.  
mar26



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

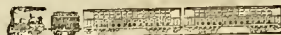


## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct in any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES.  
From ½ to 3 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA. Jy 28

## RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GOODMAN & CO.,  
Feb. 7. '56-2m.] no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS. DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush  
Printed and Unst. do., Entirely New Designs;  
MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars,  
ROPE MATTING, Every Width  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING  
N. B. We have the Plush in bond for exportation  
sep18 DOREMUS & NIXON

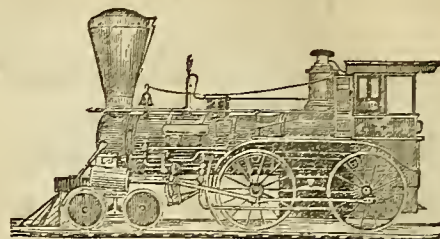
## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skilful artists. Mines explored, new Works laid off, and Geological plans prepared.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts; all sizes; Coach Lag and Telegraph Screws,

LOCOMOTIVE ENGINE LANTERNS,  
From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.  
Late Davenport & Bridges, Car Manufacturers.  
Cambridgeport, Mass.

ALFRED BRIDGES.  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
Joc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and all purposes where a Pump can be used. Also, for forcing a large body of water in a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

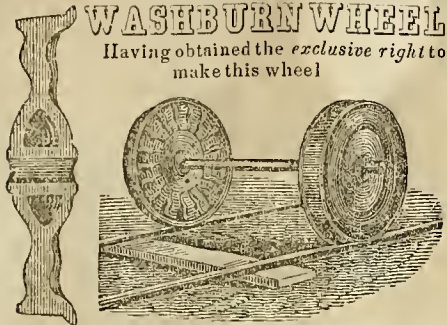
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEAL. (The highest prize) awarded to McGowan's Compound Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855.



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars.

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
car Wheels and Axles,  
Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps.

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing.

Miller's, Radley & Hunter's, Porter's, Williams', and  
others  
**LOCOMOTIVE HEAD-LIGHT,**  
Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Caudlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks.

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Bell's Patent Jack Screws  
Car and Track Jacks.

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

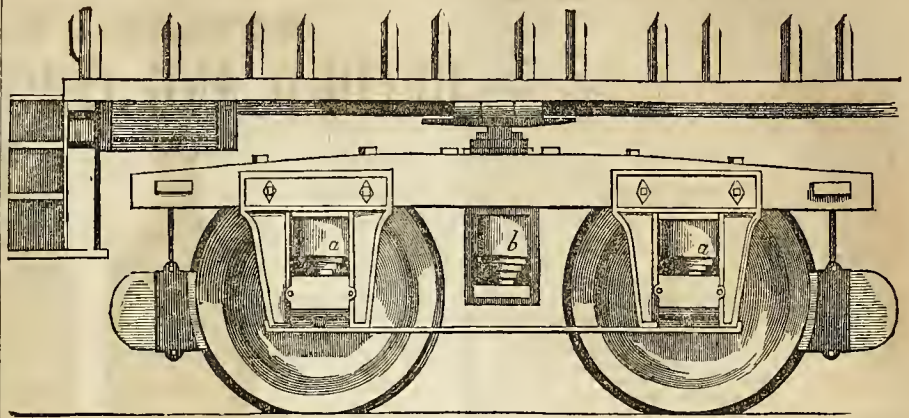
Baggage Barrows and Checks, Freight Trucks,  
**CAR FINDINGS,**  
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED.

0033-1y

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSS

### DAVENPORT, RUSSELL & CO.,

### Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Pittsburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* JOSEPH DAVENPORT.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.

### S. C. THOMSON & CO

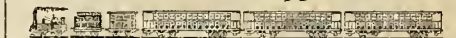
MANUFACTURERS OF

### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,  
1 n24 NEWARK, N. J.

### Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Stage leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
Robert Harris, Sup't.  
Racine, May 15, 1857. my21

### Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

In connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [jan1-1y] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. DOORMAN.

EDWIN A. POST.

RHINELANDER, DOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Doorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid.

THEODORE DEBON,  
feb5-tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.****JAMES HARRISON JR.'S****Automatic Steam Whistle,****FOR LOCOMOTIVES.****PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

**T. F. RANDOLPH & BRO.****Mathematical Instrument Makers,****N. W. Cor. 5th & Walnut sts.,****CINCINNATI, O.****Patent Self-Adjusting Lantern!****THE MOST APPROVED LANTERN FOR****RAILROADS, STEAMBOATS,****AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 ly 119 Walnut st., Odd Fellows' Building,

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE****RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes. **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton &amp; Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,****STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,****No. 112 MAIN STREET,****East Side, between Third and Fourth Streets.**

**KEEP** constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

**RAILROAD AND OTHER BLANKS.**

Printed to order in the best manner.

**Ruling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

**ARE** prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS and AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLES and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.****PATENTED JUNE 2D, 1856.**

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C.

apri2

**Thorough Bred Stock FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,****"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.







boniferous limestone. And 4. Silicious ores of the Oolitic formation. The total amount of all these ores used during the year 1854 was 12,346,000 tons.

1. Argillaceous ores: so called from *Argil*, *Argilla*, potter's clay; a fat, soft kind of earth; the ores being much of the same nature, soft and clayey; in fact, very much resembling this fat, soft earth; not much tenacity or power of resistance in this, evidently. Of this ore, 7,366,000 tons are used, being considerably over one-half of the total amount used.

2. Carbonaceous ores. Coaly: partaking of the nature of coal; having, in point of fact, much coal in its composition; crumbly and not tenacious; verily not the ore from which one would expect to make a very tough iron; accordingly we find that the metal produced from these ores is that familiarly known to us as Scotch pig. 3,845,000 tons is the quantity of this ore annually smelted. Quite enough.

3 and 4. Hematites and Silicious ores: The hematites found in England yield a fair quality of metal, though from their position in the carboniferous limestone, they are not so firm or compact as the same ores here. The quantity of this ore used is only 555,000 tons, and is mostly used to mix with the other ores, in the hope of somewhat bettering their product. The silicious or flinty ores of England produce a hard, brittle metal, owing to the presence of a too great quantity of silicium, and the iron made from them is not much esteemed—mostly used for mixing. Quantity used, 580,000 tons. These are all the kinds used, and presents in a very brief space, and a form easily understood by all, one fundamental reason of the inferiority of the English iron. If you want to coin gold dollars you must first have the gold; if you want to make good iron it is first necessary that you should have the ores.

The quality of iron we use is a matter of serious importance. Inferior iron in our railroads is not only a great loss to the companies, but continually endangers life. We should abandon the use of English iron entirely. It is an inferior article, and it is clearly demonstrated that American iron is much better.

In regard to the uses of iron, we need only say, the railroads of the United States have already consumed iron to the value of two hundred and fifty millions of dollars! Another immense consumption of iron is in steam machinery. We have two thousand steamships; we have twenty thousand steam mills and factories. Our readers may imagine the enormous amount of iron consumed in them. Another great use of iron is in buildings and furniture. As an example of this we give, from the *Washington Union*, the following account of the new dome of the capitol, which is an apt illustration of the new uses of iron:

This splendid monument of American genius is to be of cast iron and glass, 124 feet in diameter at its columnar base, and rising above the main building to a height of over 200 feet; the apex consisting of a magnificent lantern 17 feet in diameter and 52 feet high, surmounted by a bronze statue of the Genius of Liberty 16½ feet in height. The foundation of the dome is to be the circular wall of the rotunda, carried up 24 feet above its interior

cornice, and surrounded above the roof of the main building by an octagonal entablature and balcony. From cast iron brackets embedded in this circular wall are to rise a double row of hollow cast iron columns to the height of 27 feet. This colonnade is to be crowned by an entablature of 7 feet. Above that a pilastrade, with fancy attic, 44 feet high, and contracting from 108 to 65 feet in diameter; then the cap of the dome, semi-ellipsoidal, and 57 feet in height, with ornamental windows at its base. This is to be surmounted by the lantern and statue of liberty. The dome is to be simply a continuation of the rotunda, and its whole interior will be visible from the floor of the rotunda. Above the cornice of the rotunda, on the interior of the foundation wall of the dome, will appear a continuous belt of sculpture 300 feet in length, representing the history of America. The dome is to be ascended by spiral stairs between its outer and inner shell, or its roof and ceiling. There will occur frequent landings or balconies, affording both external and internal views. The present state of the work on this structure is the fitting of the cast iron brackets in the foundation for the reception of the cast iron columns.

#### STREET CONNECTION BETWEEN OUR RAILROADS.

The recent visit of our City Council to the East over the Baltimore & Ohio Railroad, and their ride over the street railroad in Baltimore, has been made the occasion for a re-agitation of that important question of a connection between the railroads centering in our city. We give below the *Sun's* report of the speech of Mr. Garrett, of Baltimore, to the excursionists on this subject:

Mr. Garrett premised that the guests had been doubtless fatigued with the numerous speeches to which they had recently listened. He would be brief, and should decline altogether the invitation, had not so much interest been manifested on the subject of our system of street railroads, especially by our friends from Cincinnati.

It is gratifying, said Mr. Garrett, to find around us so numerous and intelligent a representation of the Councils of Cincinnati, leaving the agreeable hospitalities of their friends for a practical and thorough examination of the working of a railroad through a populous and active portion of the city, impelled, as I understand they are, by a desire to obtain information to decide properly for the interest of their community an important question of a similar character.

On the opening of the Baltimore & Ohio Railroad its principal depot was at this point (Mount Clare), near the western limits, whilst the station of the Philadelphia, Wilmington & Baltimore Road was about two miles distant, in the eastern part of the city. Much prejudice existed against, and great clamor was excited by an application for a connecting road through the streets, to facilitate the transportation of passengers and freight between the two roads. It was urged that by the grant the business of draymen and laborers would be diminished, that the passage of vehicles and the general transaction of business in the thoroughfare would be seriously interrupted, and that the chief result of such facilities would be to injure the hotels of the city, to induce travelers to pass at once through Baltimore, with scarcely a glance at its merchants and business advantages.

On the other hand, the comprehensive view was presented that at all important commercial points there were competing lines to the East; that the New York Central, New York & Erie and the Pennsylvania Central Roads all tendered their best facilities, with the least interruption practicable, to induce patronage to their respective routes; and that, unless Baltimore offered every possible inducement of speed and economy of shipment, travel and trade would avoid her and flow into other channels; that the ultimate result would be to attract a large increase of business through Baltimore; that many passengers, for convenience from fatigue and other causes, though designing to visit Philadelphia and New York, would rest at Baltimore, and gradually open and improve intercourse with her merchants, and such general increase in business would permanently improve the interest of all, including the laboring classes.

Fortunately for the city, the privilege of the connecting road was granted, and it has been found to work most beneficially for all the great interests involved. As you have seen in passing, this morning, in this large and commodious car, through Pratt, one of our most crowded and active commercial streets, its general business is not interrupted. A vast increase of local business has resulted under the liberal policy of Baltimore. Our system—

"To welcome the coming, speed the parting guest,"

And to impose no unnecessary tribute on freights destined for other markets (whilst, under the tariff arrangements of the road, fully protecting and discriminating in favor of Baltimore) attracts, as it merits, approval from the traveling and business public; and our hotels, our merchants, and all interested in the prosperity of Baltimore, feel its favorable effects.

I have referred especially to the connection over which you have just passed. The Baltimore & Ohio Road has, additionally, a street connection with the Northern Central Road, and a branch to Locust Point, on the south side of the harbor, where freights destined coastwise are most economically shipped.

Gentlemen of Cincinnati, you have recently had added an important source of increased greatness to your rapidly improving city—the Ohio & Mississippi Road. You have, I learn, a distance of two miles from its station to the depot of the road which connects you with our great line. It is said the grades and the streets are favorable to the proposed connection. In the judgment of those familiar with the subject, the interruption in your great southern line is equivalent in delay and cost to a distance of 100 miles of road.

We trust your practical examination of the subject here, endorsed by the satisfactory experience of years, will enable you to decide that the interest of your community will be promoted by removing this sole difficulty in the line, and perfecting the iron bands, a complete chain from the Chesapeake to the Mississippi.

Mr. Garrett was right in the general ideas he advanced on this subject. The interposition of a crowded city like ours in the way of the through traveler is equal to full a hundred miles of road. And it is our duty, as well as our true policy and interest, to speed the traveler on his way. But nature has given us in Cincinnati the most favorable facilities for doing this without destroying our streets, and



in a way that must be confessed to be superior both for the traveler and the roads. A tunnel under Sixth street, from Mill creek valley to Deer creek valley, would accomplish this great desideratum free from all the annoyances, expenses and delays of a street railroad. Locomotive engines could be used to bring the train to a central depot, and the roads would be at once relieved from the heavy expense of keeping horse power to make the necessary transfers through the streets. This plan would be cheaper, better, and more effectual than any other. We have always advocated a connection between the roads, as required by every consideration, and we hope yet to see it made on the best and safest plan.

**MAP OF THE TERRITORY OF THE UNITED STATES—PUBLISHED BY THE GOVERNMENT.**

We are indebted to the politeness of Lieut. Abbott, of the War Department, for a copy of the new map of the territory of the United States. This map, compiled in the office of Pacific Railroad Surveys, though as yet unfinished in a portion of the engraving, still contains so much new and important information, that the War Department has deemed it best to distribute a very limited number of copies in its present condition, without awaiting its completion.

The title of the map is as follows: "Map of the Territory of the United States from the Mississippi River to the Pacific Ocean, &c.," and it contains all the authentic explorations which have as yet been made in this extensive region, having a breadth east and west of 1900 miles and north and south of 1600 miles. The map is one three millionth part the size of the country represented, or on a scale of about 47 miles to the inch, which, though too small to represent every feature and locality, is still large enough for all general purposes, and makes a sheet of 3.7 feet by 4 feet.

On this map trails of the exploring parties are all represented, with the name of the explorer and date of exploration; so that those interested in any particular section have the proper authorities pointed out, from which to seek for more extended details—making it, as far as possible, an index map.

Such portions as have not yet been explored are left blank on this compilation, or such rivers, lakes and mountains as are known to exist therein are but faintly indicated. The whole, therefore, presents somewhat a skeleton appearance, and shows how much is yet to be learned. It must be remembered, however, that this appearance is increased by the unfinished state of the map; as large areas in California and Oregon, and the trail from Great Salt Lake to Southern California, although reduced upon the manuscript map, have not yet been engraved.

No general map of the country yet published contains one-third as much certain information; and where the portions left blank on this map, with the exceptions just indicated, are filled up on others, it has been done only on vague and uncertain information, or is merely the expression of the theories or surmises of the compiler.

The topography of the mountains has been copied, as nearly as possible, from the original maps, and the assemblage thus presented, so different from anything before published, goes far to overthrow many of the prevailing ideas concerning the mountain ranges and systems into which theorists have separated this great mountainous region.

Though the ranges are in general in directions parallel to each other, within certain limits, yet the same direction is not continued throughout the mass, nor is any range continuous from Mexico to the British Possessions: they are for the most part separated from each other by valleys or plateaus, or linked together in such a way as to defy us at present to say in many cases what range is the continuation of another. The divides between the Atlantic and Pacific are not always mountain ridges, nor do the mountain ranges always form divides, as many of them are broken through by rivers.

The map shows that, having once entered the mountain region, the traveler is constantly surrounded by them, and there seems a necessity for considering all the mountains from the western border of the plains to the Pacific Ocean as *but one great system*.

A brief memoir will accompany the map when finished, giving an account of the routes pursued by the different explorers, the various methods of observation employed, &c.

The map gives the names and locations of the Indian tribes, represents all the mountains that have been explored, and in every part gives the elevation of the country above the level of the sea. It has served the War Department greatly already in pointing out the routes for new explorations, and copies of it have been sent to the offices of the other departments, and it was much used in determining the location for the new wagon roads, for the construction of which the last Congress made provision under the Department of the Interior.

The work of compilation has been one of no little labor, and has been in progress nearly three years. It is the design of the War Department to continue to add to it all authentic information, and to make it in every respect a complete record of the progress of the explorations in that country which separates the settlements in the Mississippi valley from those near the Pacific coast.

—The Chicago, Burlington and Quincy R. R. has declared a dividend of 5 per cent.

**THE NEW YORK & ERIE AND THE N. YORK CENTRAL R. R.**

We noticed in our last the settlement of the difficulties between these two companies arising from the ruinous rates of competition adopted by the Erie Road.

Some points of the agreement are as absurd as the difficulty in which they originated. We will instance one or two.

*Resolved*, That if, in the opinion of the New York and Erie Railroad Company, it shall be deemed expedient to cease to sell tickets over the two roads, having coupons attached for other roads, or to allow other roads to sell coupon tickets over the two roads, the New York Central, at the request of the N. York and Erie Railroad Company, will join the latter Company in abolishing the use of coupon tickets over the two roads on and after the first day of September next.

The effect of this provision would be at once to yield the vantage ground that these two roads have been laboring for years to obtain. If they abandon the sale of coupon tickets they lose at once the advantage of the aid and assistance of the various roads now selling these tickets, to direct travel and business over their lines. They throw open the doors of competition to rival routes now in a measure closed by the coupon system, and actually invite the competition they have been laboring to repress.

All free passes to be abolished by a resolution of the Board of Directors of each Company, except to the members of the Legislature of New York, and the members of the Common Councils of the cities of Albany and Buffalo by the New York Central, and the members of the Legislatures of the States of New York, New Jersey and Pennsylvania, and the members of the Common Councils of New York, Jersey City and Buffalo by the New York and Erie Railroad Company, and the free passes for the return of the drovers who actually accompany the stock shipments.

The system of free passes like that of too low fares is universally acknowledged to be an injury especially in its abuse. And that it is seriously abused there can be no question. Free passes are granted with a degree of indiscriminate that would argue that it costs nothing for railroads to transport travelers. They are showered down on hotels, steamboats, forwarding houses, drovers, canal boat lines and others, not upon proprietors merely, but upon all connected with such establishments, from the boot-black and porter, upwards. Now the whole system is wrong and should be abolished. But we have no idea that the attempt will be sustained for any length of time. The necessities of the roads for business will compel them to grant favors to those who they think can control it for them, and thus the best resolutions will be broken. It is so with fares and has been so with passes, and will be so again. The best that could be done would be to restrict the power of giving passes and introduce greater discrimination. That might be carried out. The other course will not.



# Railroad Daguerreotypes.

No. LXXXIV.

## HUDSON RIVER R. R.

The report of this company is dated July 24, 1857. The following are its officers:

President—SAM'L SLOAN, Brooklyn, N. Y.

Treasurer—C. C. CLARKE, N. Y. City.

Secretary—F. M. NORTH, Spuyten Duyvil, N. Y.

Superintendent—A. F. SMITH, N. Y. City.

### DIRECTORS.

SAM'L SLOAN,  
E. D. MORGAN,  
J. D. WOLFE,  
E. JONES,  
WM. KELLY,  
M. H. GRINNELL,  
D. T. VAIL,  
W. H. HAUS,  
M. L. SYKES, JR.,  
ERASTUS CORNING,  
JAMES BOORMAN,  
R. P. GETTY,  
E. M. GILBERT.

The ANNUAL MEETING of the stockholders is held on the first Tuesday in June.

### RUNNING EQUIPMENTS.

No. of locomotives.....61.

Passeng'r cars, 1st class, 97.

" " 2d " 10.

Baggage " .....28.

Freight and Exp. cars, 524.

The capital stock is as follows:

No. of shares.....30,623 full.

Price per share.....\$100.

Capital.....\$3,770,956 10.

Interest.....\$708,656 10.

The debts of the road are:

1st mortgage.....\$4,000,000.

Interest.....7 and 6 per cent.

When due.....1869 and 1870.

Int. payable.....Feb'y and Aug.

Trustees.....Jas. Brown, Samuel S. Howland and Henry C. De Rhand.

2d mortgage.....\$2,000,000.

Interest.....7 per cent.

When due.....1860.

Int. payable.....June and Dec.

Trustees.....R. B. Minturn, John C. Green and W. M. De Forest.

3d mortgage.....\$1,823,000.

Interest.....7 per cent.

When due.....1875.

Int. payable.....May and Nov.

Trustees.....A. Norvie, R. L. Kennedy & Jos. Tuckerman.

Convertible Bonds.....\$1,019,000.

Interest.....7 per cent.

When due.....1867.

Int. payable.....May and Nov.

Floating debt.....\$343,504 99.

### RESULTS OF OPERATION.

The following are the results of operation for the years 1854, 1855 and 1856. Fiscal year ends Sept. 30:

#### RECEIPTS.

	1854.	1855.	1856.
Passengers.....	\$1,209,820 00	1,216,618 93	1,113,469 00
Commutations..	27,486 00	34,916 23	31,403 00
Freight.....	404,145 00	566,625 52	730,694 00
Mails.....	33,400 00	32,400 00	32,400 00
Rents.....	7,370 00	9,548 46	10,583 00
Miscellaneous..	12,000 00	9,695 69	6,830 00
Cost of operat'n.	\$1,298,818 36	1,208,141 39	1,206,345 04

#### DETAILS OF CONSTRUCTION.

Length of road.....144 miles.  
Termini.....N. York and E. Albany.  
Gauge.....4 feet 8½ inches.  
Single track.....144 miles.  
Double track.....101 "  
Sidings.....10 "  
Length of rail-bars.....16 to 21 feet.  
Weight per yard.....70 lbs.  
Kind of iron.....American and English.  
When laid.....1847 to 1851.  
Kind of rail.....T.  
Ties.....Oak and Chesnut.  
Length.....7 feet 5 inches.  
Size.....6 by 6 inches.  
Ballast used.....Gravel.  
Fuel.....Wood, coke and coal.  
Cost per annum.....\$245,000.  
Telegraph on road.

No. LXXXV.

## CAPE COD RAILROAD.

The report of this road is dated June 1, 1857.

The following are its officers:

President—J. H. W. PAGE, Boston.

Treasurer and Superintendent—E. N. WINTON, Hyannis.

Secretary—AMOS OTIS, Yarmouth Port.

### DIRECTORS.

J. H. W. PAGE,

BENJ. BURGESS,

RICH'D BORDEN,

M. S. LINCOLN,

N. S. SIMPKINS,

ALEX'R BAXTER,

MATTHEW STARBUCK.

The annual meeting of the stockholders is held on the second Wednesday in July.

### RUNNING EQUIPMENTS.

No. of locomotives.....7.

Passenger cars.....11.

Baggage & Exp. cars.....8, of 8 wheels.

The capital stock of the road is:

No. of shares.....10,000.

Price per share.....\$60.

Capital.....\$600,000.

Am't of last dividend...3 per cent., in July, '54.

The debts of the road are:

Domestic Bonds.....\$203,000.

When due:

Dec. 1, 1857.....\$108,500.

Dec. 1, 1859.....41,500.

Dec. 1, 1861.....30,000.

Dec. 1, 1860.....18,000.

Dec. 1, 1865.....5,000.

Interest.....6 per cent.

Int. payable.....1st Dec. and 1st June.

The following are the results of operation for the years 1856 and 1857. Fiscal years ends

June 1st:

#### RECEIPTS.

	1856.	1857.
Passengers.....	\$88,178 93	\$91,294 92
Freight.....	25,659 50	25,557 13
Mails.....	5,650 00	4,842 00
Express.....	2,000 04	2,000 00
Miscellaneous.....	301 03	421 12
	\$122,789 80	\$124,115 21

Cost of operation, including renewals of iron & sleepers...\$70,376 49 \$84,324 31

#### DETAILS OF CONSTRUCTION.

Length of road.....46.1 miles.  
Termini.....Middleboro' & Hyannis.  
Gauge.....4 feet 8½ inches.  
Track.....Single.  
Sidings.....1½ miles.  
Length of rail-bars.....Average 21 feet.

Weight per yard.....56 lbs.  
Kind of iron.....American.  
When laid.....28 miles in 1847 and 18 in 1854.  
Kind of rail.....T.  
Ties.....Chesnut and Spruce.  
Length.....7 feet.  
Size.....6 by 7 inches.  
How often changed.....Once in 10 years.  
Ballast used.....Sand and gravel.  
Fuel.....Wood.  
Am't per annum.....2,500 cords, at \$5.  
Telegraph on road.

# Railroads.

## CAPE COD R. R. CO.—ANNUAL REPORT.

We are indebted to the officers of this company for a copy of its Annual Report, dated May 31, 1857. As the Report is a condensed statement of facts, we give it entire:

"The Directors of the Cape Cod Railroad Company respectfully submit their report for the year ending May 31, 1857.

Receipts of the company from May 31, 1856, to May 31, 1857:

From Passengers.....	\$91,294 92
Freight.....	25,557 13
Mails.....	4,842 00
Express.....	2,000 04
Rents.....	303 00
Wharfage.....	118 12
	\$124,115 21

Expenses.....	\$4,324 31
---------------	------------

Net income.....	\$39,790 90
Interest on debt, funded and floating*.....	18,659 72

Balance.....	\$21,131 18
--------------	-------------

Which has been credited to Reserved Fund account.

The receipts of the preceding year were.....	\$122,789 50
And the expenses.....	79,376 49

Net income.....	\$43,473 01
And the interest paid on funded debt was ..	10,932 00

Balance.....	\$32,481 01
--------------	-------------

Showing a decrease in the last year, in the net income, compared with the preceding year, of \$3,622 11.

### The assets of the company are:

Balance of construction account, which was closed June 1, 1856.....\$850,000 00

Real estate not needed for use of the company.....	17,939 39
Fuel and oil on hand.....	2,044 50
Stock in machine shop.....	8,757 50
Cash.....	9,299 42
Bills receivable.....	17,609 63
Stock of this company unsold, 671 4-10 shares, at \$60.....	40,584 00
Total assets.....	\$945,934 44

### The liabilities of the company are:

The capital stock, 10,000 shares, at \$60.....	\$600,000 00
Dividends unpaid, Nos. 1, 2, 3, 4 and 5.....	497 50
Dividend No. 6, payable in stock.....	7,767 56
Reserved fund account.....	39,131 18
Interest on bonds of company, due June 1, 1857.....	5,600 00
The funded debt or bonds of the company... Due Treasurer of Massachusetts.....	185,000 00
Floating debt of the company.....	18,000 00
Interest on assessments unpaid.....	87,078 96
Estimated land damages and construction bills unpaid.....	1,731 95
Total liabilities.....	\$945,934 44

The floating debt of the company is, for notes and bills payable.....	\$87,078 96
Dividends unpaid.....	497 50
On dividend No. 6, payable in stock.....	7,767 56
Interest on bonds, due June 1, 1857.....	5,600 00
Interest due on assessments.....	1,731 95
Estimated land damages unsettled and construction bills unpaid.....	1,127 29
	\$103,803 26

\*The interest on floating debt has heretofore been charged to construction. That account being now closed, the interest on that debt, amounting to \$7,659 72, has been taken from net income; consequently the balance is less, by that amount, than it would have been had the Report been made up as in former years.



As an offset to the above, the company has the following property :

Cash.....	\$ 9,299 42
Bills receivable.....	17,609 63
Real estate not needed for use of the road.....	17,939 39
Wood and oil on hand.....	2,044 50
Stock in machine shop.....	8,757 50
671 4-10 shares of the stock of this company unsold.....	40,984 00
	\$95,934 44
By last report the floating debt was.....	\$123,769 19
And the property in offset was.....	91,959 19
Balance.....	\$31,800 00
We now have a debt of.....	\$103,803 26
And property in offset of.....	95,934 44
Leaving a balance of.....	\$7,868 82
Balance last year.....	\$31,800 00
This year.....	7,868 82
	\$23,631 18
Less bonds sold since last report.....	2,800 00
Carried to reserved fund account.....	\$21,131 18

## BOND ACCOUNT

Bonds issued prior to June 1, 1855:	
Due Dec. 1, 1857.....	\$108,500
Due Dec. 1, 1859.....	41,500
Due Dec. 1, 1861.....	30,000
In 1855 the stockholders, by their vote, authorized the Directors to issue bonds to the amount of \$100,000, of these bonds there have been issued only.....	5,000

Whole amount issued.....\$185,000

## RECEIPTS AND EXPENSES.

The receipts of the company for the year ending May 31, 1857, are \$1,325 71 more than in the preceding year, and the expenses \$4,947 82 more.

In the year ending May 31, 1856, the receipts from passengers were.....	\$88,178 93
In the year ending May 31, 1857.....	91,294 92

Increase in passenger receipts.....	\$3,115 99
The amount received for freight last year was.....	\$26,659 50
Amount received this year.....	25,537 13

Showing a decrease in receipts of.....\$1,102 37

The expenses, for the past year, have been increased by the purchase of iron and sleepers to the amount of \$8,000 (a part of these are now on hand, ready for use when needed, but have not been estimated in account of stock on hand). Likewise for rebuilding an engine, estimated at \$3,500, and for removing snow and ice \$3,309 48.

Besides these, several other items of extraordinary expense have been paid for patent rights, &c.

## RESERVED FUND, &amp;c.

During the past four years \$99,765 18 of the earnings of the road has been credited to reserved fund account. From this fund the sum of \$78,634 67 was used for construction, thereby reducing that account, as per report of last year, to \$850,000. The balance of this fund, \$21,131 18, has been applied towards the payment of the debt of the company.

The balance of interest due to stockholders on assessments, \$1,731 95, will be paid by the Treasurer on demand.

The floating debt of the company, remaining to be paid from the earnings of the road, or from sales of this company's stock or bonds, is now \$87,078 96.

The whole road, from Middleborough to Hyannis Wharf, is now in good condition, the buildings in good repair, and the rolling stock

in as good running order as at the time of our last report. We believe the whole road will compare favorably with any road in New England. No person has been injured on this company's road the past year, and no passenger has been injured since the opening of the road.

Respectfully submitted,

J. H. W. PAGE,  
RICHARD BORDEN,  
BENJAMIN BURGESS,  
ALEX'R BAXTER,  
NATH'L S. SIMPKINS,  
M. S. LINCOLN,  
*Directors.*

June 19, 1857.

[From the Memphis Eagle and Enquirer]

## RAILROADS IN TENNESSEE—LETTER FROM THE STATE CONTROLLER.

CONTROLLERS'S OFFICE,  
NASHVILLE TENN., May 30, 1857.

John L. T. Sneed, Attorney General of Tennessee.

DEAR SIR:—Your favor of the 20th inst., came duly to hand, in which you request me, as an officer of the State, to give you an early answer to the following interrogatories, viz: "What is the condition of the different railroad companies in Tennessee, what amount of bonds have been endorsed by the State and issued directly to them, and how have they met their engagements as to interest, &c.?" What are the liabilities, and what is the amount of taxable property in the State, according to the last assessment? Are the roads finished self-supporting—or is it likely from present indication, that any of them will become chargeable to the State, and thereby affect the credit of the same.

I reply to the foregoing, I can now only give you a brief general statement of the condition of the several roads, and of the liabilities and resources of the State. Time will not allow me to do more at present. My annual report will appear in October next, when a more explicit statement will be given to the public, and more in detail.

First, as to the general condition of roads. The Nashville and Chattanooga Railroad has been for some time past completed, and is doing a large business. This company, I understand from reliable information, at its last annual meeting, declared a dividend of three per cent. to the stockholders, after paying its expenses, accruing interests, and retaining a sinking fund for the further improvement of the road, equipment &c. The whole State loan to this road is \$1,600,000. This company has always met its interest on the bonds loaned promptly. The East Tennessee and Georgia Railroad was completed about two years ago, and is also doing a large, and doubtless a profitable business. This is one of the best constructed roads in all the South, and will certainly be a paying one. The amount the State loaned to this road is \$1,221,000. This company will, as heretofore, meet its interest with promptness. The Memphis and Charleston Railroad has been very recently finished, and is already doing a good business. This road will, in my opinion, be a paying one, and its stockholders must, before a great while, realize from it handsome dividends. The State loan to this company is \$1,100,000, the interest upon which has always been punctually met. The Mississippi Central and

Tennessee Railroad has probably been finished to Jackson within the last few days. The amount of bonds issued to this company by the State is \$544,000, the interest of which has hitherto been promptly paid. The road running, as it does, through a very rich, fertile, and productive region—one of the first cotton growing portions of the State—there can be but little doubt, if any, in regard to its doing, very soon, a handsome and profitable business. The East Tennessee and Virginia Railroad Company, from information recently obtained, are pushing their road rapidly to completion. More than half the road is already finished and in good running order. The cars are now running above Knoxville to Bull's Gap, a distance of 57 miles, and on the upper end to Watauga river, 20 miles. This is one of the most important roads, in many respects, in the State. It constitutes a link in the great chain of railroad, which, when completed, will be nearly 3,000 miles in extent, and is destined to be, from its natural position, one of the greatest thoroughfares for travel in the Union. This company has never failed to pay the interest due upon the loan made to it by the State, and no one, I presume, will doubt for a moment its ability to do so, after the road is finished. The Mobile and Ohio, Louisville and Nashville, Tennessee and Alabama, and other roads, are all advancing under the prospects warranting the hope of speedy completion; and, by their construction, the landed property of the State has been enhanced many millions. Not a single road has yet become a defaulter, but all have uniformly paid their interest and with great promptness. In regard to the bonds loaned to the several roads now finished, I consider the State as being already unquestionably secured against any loss. The roads, being self-supporting, will, in my judgment, have not only the ability to pay the interest and a sinking fund as, required by law, with which, to meet the bonds upon maturity, their first instalment has been paid into the treasury, but will also pay handsome dividends to the stockholders.

The whole amount of bonds, up to the present time, endorsed by the State and issued to the several roads, and for which it holds statutory liens on each security, is \$8,265,000.

Secondly, as to the liabilities and resources of the State. The total State liability actual and contingent, up to the present date is \$12,337,856 66. This will be gradually increased as the unfinished roads progress in construction. The actual indebtedness of the State is \$4,072,855 66, and for which the State has no source to look to for payment, but must ultimately, when the debt matures, be paid out of the State Treasury, unless, in the meantime it is otherwise provided for. The liability incurred on the part of the State by loaning its credit to the several railroad companies, together with the actual State indebtedness, make up the sum first mentioned—the total liability of the State. By reference to the former Controller's Report, you will see that the total value of all the taxable property in the State for the year 1854, was \$219,011,047 81. For the year 1856 the valuation increased to \$257,932,867 57, or thereabouts, the estimates from some few counties not being exactly correct, the increase in two years being about \$38,000,000. Aggregate statements for the year 1857 have been received up to this date from thirty-two counties, which show, compared with the same counties last year, an increase in the valuation



of the taxable property of \$16,000,000. If the balance of the counties increase in the same ratio, the total increase in the State the present year over the last cannot fall much, if any, below \$40,000,000.

The State, as you are aware, takes no stock in any of her railroads—it only loans its credit, in the shape, of bonds on graded roads, so far as to purchase iron and equipments, and a lien is thereby executed to the State upon the whole road fixtures. It is hardly probable that any road in Tennessee, under the provisions of her internal improvement acts, will ever be undertaken without a *prestige* of success: before State liability begins, private means must be expended in grading, and cross-ties procured, which could be obtained only upon secure projects. I do not believe that any of the roads now finished, or in course of construction, will ever become chargeable to the State, and thereby affect its credit. If any one of the several roads should prove to be a failure, and become so, the iron and equipments alone would very nearly meet the loan; so, in any event, the State would not be seriously embarrassed. In such case the interest would be promptly paid by the State, through the bank of Tennessee, which has ample means to do so. But, as I before stated, the State loans its credit only to a specific amount to each road, after it is graded and cross-ties procured, which must be done with private means, for the purchase of iron and equipments only—when a lien upon the whole road and fixtures, which has priority over all others, is executed to the State.

You will excuse me for not being more explicit, and for not giving you the information you desire, more in detail. The duties I have to perform will not permit to be more so now. I hope however, that you will be able, from the foregoing statement, to form some general idea of the true condition of our roads and the resources and liabilities of the State.

I am, sir, with highest respect.

Your obedient servant,  
JAMES C. LUTTRELL  
Comptroller.

[From the Atlas and Argus]

#### THE ALBANY BRIDGE INJUNCTION.

In the case of ROBERT D. SILLMAN against The Hudson River Bridge Company, in which a motion was made last fall before Judge NELSON, for an injunction restraining the defendants from proceeding with the construction of the bridge pending the litigation, the decision has just been announced. Judge NELSON grants the injunction, not because he has arrived at the conclusion that the bridge would obstruct navigation, but because upon the facts before him he cannot determine the question, and as further proofs must be taken, and as the expense of the bridge is to be large, he thinks the construction should not proceed until the case is decided.

For this reason he grants the injunction. He expresses no opinion upon the merits of the main question in the cause—except to hold that a bridge may be built, if it will not seriously impede navigation and this is a question to be determined on further proofs to be taken in the cause.

The granting of the injunction decides nothing in the bridge controversy, except that the construction shall not proceed during the pendency of the suit, but must depend upon the final judgement. The case is one

of so much public interest that we subjoin a copy of Judge NELSON's opinion:

[The opinion begins by setting out the facts in the case and by an examination of the provisions of the bridge charter—the Judge holding that under it the bridge may be used for the passage of vehicles and persons, as well as Railroad trains. The Judge then proceeds as follows:]

The grave question in the case therefore, is, whether or not, a bridge constructed according to directions in the charter for the conveyance over the same, of trains of Railroad cars, and for the accommodation of the traveling and business public, in general, will constitute an obstruction of the free navigation of the river within the meaning of the Constitution, and acts of Congress, securing to the complainant, other citizens a right to the enjoyment of the same?

The affirmative is maintained by the complainant, and denied by the defendants.

The proofs before us, bearing upon question, are very voluminous and conflicting, and called upon to determine the case finally upon them, would occasion considerable hesitation and embarrassment.

The question, however, as presented here on this motion, is of less weight and urgency, as it is limited to the simple enquiry, whether a case has been presented which calls upon the Court to interfere and arrest the erection of the bridge until an opportunity is afforded for a more full examination of witnesses, and mature consideration of the alleged obstruction.

A preliminary inquiry in this and like cases, should especially be made by the party complaining, and the work contemplated promptly enjoined, if there should be any reasonable grounds for believing that the bridge might finally be held an obstruction, and hence subject to be abated, at the expense and loss of the defendants involved, might otherwise be heavy and ruinous. A consideration that pressed most strongly upon the Court in passing upon the obstruction in the case of the Wheeling bridge was the heavy expenditure of the defendants in the erection, and regret was expressed that the Judge before whom the application for the injunction was first made, had not enjoined any further proceedings till the great question involved had been finally disposed of. No court can avoid feeling the weight of this consideration, or being considerably influenced by it, in deliberating upon the application for an injunction. A refusal is an encouragement to go on, and may greatly embarrass the determination in the final hearing. The case is very different from the ordinary one, where the only loss or suffering arising from the refusal is that which accrues to the complainant—in such cases, if the right is regarded as doubtful, the injunction is usually withheld till the right is established by a trial at law, or on the final hearing.

But, in the present and similar cases, the injury to the complainant is not only involved, but also encouragement to the defendants to go on, leading to heavy expenditures, which the court may feel bound, at the final hearing to disregard and render useless.

These considerations have led the Court of Chancery, in England, especially, where the title of the complainant is clear, but the obstructions denied, and the case to be sent to a court of law for a trial, to accompany the order with an injunction until the hearing after the coming in of the result of the trial at law.

Now in this case, there is no question as to

the title, or in any other words the legal right of the complainant to a free and unobstructed navigation of the Hudson River. This has been secured by the Constitution and acts of Congress under which the right is claimed, and and which, as I understand it, was not denied on the argument.

The defence was placed on the ground that a bridge constructed as provided for in the charter would not substantially obstruct or impede this right; but on the contrary was consistent with its full enjoyments.

It is upon this question that I entertain doubts at the present stage of the proceedings and proofs in the case, and am not prepared to agree with the defendants. I cannot say, as present advised, that, the erection of the bridge in the mode prescribed, and in connection with the powers conferred in the use of it, will not be a serious or material obstruction to the free navigation of the river.

What the truth may be upon a more full and thorough development of facts, of course, it is now impossible to determine. We speak only of the case as now presented. Many of the facts upon which the question of obstruction must ultimately turn, have not been sufficiently attended to by either of the parties. Before the final hearing they will doubtless realise their importance, and present them with more method and accuracy to the court.

In my Judgement, the real and turning point in the case is, whether or not, regarding the probable travel, and transportation across bridge by railroad cars, and as a common highway, and also the business depending upon the free navigation of the river, up and down at this place, the draw, or draws, will furnish reasonable means to prevent any substantial obstruction to such navigation—that is, a navigation from being seriously or materially impaired.

Now, this is a question of fact, and in looking at it with a view to an intelligible determination, the extent of the travel and transportation across the bridge must be enquired into, as every railroad train of cars, and every vehicle, animal or person crossing in the course of common highway transportation or travel, will necessarily require the draw or draws to be closed, when the navigation must in fact, be obstructed. Will the closing of the draws for the accommodation of this transportation and travel be compatible or consistent with the fair use of the river for the purposes of the transportation of freight and persons by steam vessels and other water craft at this point, up and down the same? The data for the solution of this question is not sufficiently before us.

It is manifest that the crossing at this point in both directions, will be great—whether the conflict may not be reconciled by means of proper draws, so that each privilege or right claimed may be reasonably enjoyed, it is not for me, at present to say. Indeed, it is impossible to give any satisfactory judgment in the matter upon the present proofs in the case.

Some idea of the extent of the business as confined to railroad trains, may be derived from a perusal of the 12th section of the charter. It provides that "any railroad corporation whose road now has, or shall have, a terminus at or shall run its trains to or from said city of Albany, or East Albany, or shall run its trains in connection with any road having such terminus, shall be permitted to use said bridge for railroad purposes upon such terms as the directors of the several companies interested may agree, and in case



they shall not be able to agree, the terms shall be fixed by the Canal Board."

Under this clause, all the railroads running to and from Albany and East Albany, and all roads running in connection with them, are entitled to the benefit of the use of the bridge. This included all the several lines of road leading to and from these points, now in operation or that may be hereafter constructed; and in addition to this use, is to be taken into account the use for common travel as a public highway.

As to the business up and down the river, carried on by vessels propelled by steam and sails, some idea may be gathered of the extent of the business, and of the number of passages through the draws, from a fact stated by several witnesses, that at least seven-eighths of all the freight upon the Western and Northern canals, arriving at and leaving tide water, enters and leaves the Hudson river at West Troy; and in addition to this, is to be added the business growing out of the coasting trade, carried on with the towns above the bridge.

There is a question also involved in this case, that I desire to have discussed, namely: how far the personal duties and obligations imposed upon the grantees of the charter of a bridge to remove obstructions to the navigation occasioned by the erection, should be taken into the account in determining the question of its lawfulness.

This assumes that the construction would operate as an impediment to navigation, but that it could be relieved by the agency of the grantees, as the obstructions occurred. For instance, in this charter, it is made the duty of the defendants to keep in readiness steam tugs to tow sailing vessels through the draw; also, that they shall not suffer sand bars to continue, that may be formed by reason of the erection of the bridge or piers, but shall remove the same.

Suppose that the draw constructed would not admit of the passage of sailing vessels, without the aid of the tug, would this provision of the charter legalize the bridge? Again, suppose it should be admitted that the piers of the bridge would be the means of the formation of bars above and below them so as to impede navigation, would the duty enjoined upon the defendants in the charter to remove the obstruction, answer the legal objections to the bridge? This question, so far as I know, is new, and as a general principle is of very great importance, and may have a considerable bearing upon this case in its final bearing. The opening and closing of the draw must depend more or less upon human agency; it must necessarily be so as long as it is admitted that a proper draw may relieve the bridge from obstructions to the navigation. The question is, how much farther may it be relied on in cases where the bridge from its construction constitutes an obstruction even with the proper management of the draw! Another question also may be involved in the final determination, requiring the most deliberate consideration, and that is, how far the business of commerce upon the rivers of the country—these great natural highways for the convenience of trade and intercourse—is to yield to the convenience and accommodation of the conveyance of passengers, the chief and primary business of railroads? It is undoubtedly true, that these roads furnish very considerable facilities for the transportation of goods as well as passengers, and deserves the fostering care and encouragement of the government and

country; but, it will, probably, not now be denied, after the experience possessed of the practical uses of them, that in the transportation of goods, especially heavy freight, they cannot compete with the great natural thoroughfares subjected to these uses by steam vessels and other water craft.

Great care, therefore, should be taken, that the facilities thus furnished by a beneficent Providence for the convenience of the business and commerce of the country, should not be so encumbered and obstructed by the erection of artificial means of crossing, as to render them virtually useless for the purposes of navigation. And it is especially important, that some general principles should be arrived at in this case, which, while the fair and reasonable navigation of the rivers is secured to the public, every facility consistent with the same, may be extended to railroads in the passage across the stream.

The principles proper to be applied to this case will be, generally speaking, applicable every other instance of bridging this river, and it is apparent that they must so regulate and control the erection as that, however multiplied as the exigencies and business necessities of the country may demand, the reasonably unobstructed navigation of the river is still maintained. No one can desire to see this great natural thoroughfare seriously obstructed, or its business or its commerce materially crippled. The guarantees of the Constitution and acts of Congress but harmonize in this respect with what must be the feelings and wishes of the whole business community.

A question once presented in this State in the Court of Chancery and Court for the Correction of Errors, and decided, namely, whether or not the navigation between different ports upon a public river within the same State come within the power to regulate commerce "among the States," need not be considered, as no such question has been made by the defendant. The affirmative has been maintained by the highest authority of this State. (3 Cowen, 713. The steamboat Co. vs. Livingston, 15 Wend. 114. The People vs. Saratoga and Rensselaer R. R. Co.)

Nor need we examine the question, whether or not the power in the State to authorize the building of a bridge across a public river navigable from the sea, is not subordinate to that conferred by the Constitution upon Congress to regulate commerce, as no such question has been made in the case. That the power in Congress is paramount was conceded on the argument, and was, also, in the fullest and broadest terms by the distinguished Judge (Chief Justice Savage) on delivering the opinion of the Court in the two cases already referred to.

Upon the whole, on the grounds and for the reasons assigned, we have arrived at the conclusion that it is due to the rights and interests of the parties, as well as the great questions involved, to enjoin the proceedings in the erection of the bridge until the final hearing of the case.

I would further suggest, that although neither of the parties has furnished me with an amendment of this charter by the Legislature since the argument, and pending the consideration of the motion, it has come under my notice; and if the charter is to be regarded as a public act, we shall feel bound to consider it at the final hearing.

This amendment reduces the width of the draw, if but one, from two hundred to one hundred and eighty feet, and if two, from one

hundred and fifty to one hundred and ten each.

It is true certain officers named, may, in their discretion, direct these draws to be enlarged, but this qualification presents a contingency we cannot notice or attribute any weight in passing upon the question involved.

It will be for the parties to consider, whether it will not be for the convenience of all concerned, that in the preparation for the final hearing, the amendment of the charter be taken as modifying the original act, so as to embrace the whole case in one hearing.

Much of the evidence now before me relates to a bridge with the draws as originally prescribed, and, of course, would be entitled to diminished weight when used to uphold the draws as altered in the amendment.

Let an injunction issue according to the prayer of the bill.

**MORE INJUNCTIONS.**—We find the following in the Philadelphia Ledger's report of proceedings in the Supreme Court on Monday last.

*Crawford County, vs. The Pittsburg and Erie R. R. Co.*—An Application for an Injunction.—The following entry was made on the Docket viz:—Parties consent that a preliminary injunction be issued to restrain the Corporation from negotiating any bonds in the hands of the Corporation or its officers belonging to the Company and in its hands on the 19th day of June, without the consent of the County of Crawford:

*Lawrence County vs. The North Western R. R. Company.*—Motion for a special injunction to restrain the said company from selling or in any wise disposing of the Bonds of Lawrence County, issued to said Company. Injunction refused.

#### PACIFIC WAGON ROAD.

From the last number received of the Des Arc (Arkansas) Citizen, we copy the following:

**"CALIFORNIA ROAD EXPEDITION.**—In conformity with an act of Congress for the construction of a wagon road from El Paso to Ft. Yuma on the Colorado, a company has been organized to complete the work, and the following officers selected: J. B. Leache, superintendent; W. P. Cook, assistant superintendent; M. A. McKinnon, disbursing agent; N. Henry Hutton, chief engineer; G. C. Wharton, P. G. Hume, W. D. Cross, assistant engineers.

"This company, composed of one hundred men and forty wagons, arrived here yesterday week, and pitched their tents on the banks of the White river, to await the arrival of the oxen which are to haul the stores, etc., for the use of the expedition. The government stores were received here two weeks since, by river, awaiting the arrival of the wagons and mules which came overland from Memphis. The train will be divided here, the ox-train proceeding through Texas, via Belknap and Chadbourne, thence on the south side the Llano Estacado, or Staked Plain, to the Rio Grande; the mule train will pass through to the northward of Forts Belknap and Chadbourne, thence through to the Llano Estacado to the Rio Grande, at or near Fort Fillmore. Col. Leache proceeds with the mule train, and Capt. David C. Woods takes charge of the ox train.

"The officers above named are gentlemen of fine social qualities, and we have experienced the pleasure of a number of agreeable hours in their company."



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r st.	When Payable.	Where Payable	When Due.	Description of Bond.	Quot' of Bonds	Name of Company.	Quot' of Stock	L'n'h of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hmp'r	.....	173	6,000,000.00	.....	.....	.....	.....
498,800	6			1862-3	2d "	.....	Androsco'g'n & Kennebec	.....	54.55	1,400,000.00	.....	209,475.46	110,346.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,545				now	"	.....	B'ngr, Old T. & Milford.	.....	12.5	135,000.00	52,545.26	39,104.40	2,671.61	8 pr. ct.
600,000	0			1860	"	.....	Boston & Worcester.	.....	44.5-8	4,500,000.00	500,000.00	1,108,781.90	437,652.03	15,000 in 53
500,000	7		N. Y.	1866	1st mortgage.	.....	Buffalo & State Line.	.....	.....	1,300,000.00	.....	.....	.....	180000 4.6m
300,000	7			1857-9-62	Income.	.....	" " "	.....	.....	.....	.....	.....	.....	5 pr. ct. 6m.
200,000	7			1864	Domestic.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
577,187	6			1872	4th mortgage.	.....	Central Ohio.	.....	.....	.....	.....	.....	.....	.....
192,300	7			1874	1st mortgage.	.....	Champl'n & St. Law'rnce	.....	43	1,872,800.00	1,001,087.00	162,200.00	77,500.00	10 per ct.
280,000	7				2d "	.....	Ch'r'l'te & South Carolina.	.....	110	1,750,000.00	280,000.00	291,219.86	47 per ct.	.....
1,440,000	6-7-8		N. Y.	1864-7	Domestic.	.....	Ch'go, Burl'ng'n & Quincy.	.....	138	3,746,900.00	3,114,000.00	1,095,185.00	571,225.23	15 pr. ct. 6m
1,300,000	8			1868-9	1st mortgage.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
374,000				1868-76	2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
1,500,000					Convertible.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
532,000					1st mortgage.	.....	Chicago, Fulton & Iowa.	.....	.....	.....	.....	.....	.....	.....
104,000					2d "	.....	Cin. Will'ng'n & Zanesville	.....	5.	1,761,149.16	2,241,500.00	221,491.96	.....	.....
805,500					3d "	.....	" " "	.....	25.	.....	.....	.....	.....	.....
540,000	6				Income.	.....	" " "	.....	.....	.....	.....	.....	.....	.....
43,000				1873	Convertible.	.....	Cleveland Col. & Cin.	.....	103 3/4	4,741,920.00	.....	1 3,754	700,804	6 per cent.
400,000	7			1864	1st mortgage.	.....	Cleveland & Mahoning.	.....	85	1,500,000.00	.....	.....	.....	.....
500,000	7				2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
500,000	6			1873	1st mortgage.	.....	Cumberland Valley.	.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24
1,000,000				1857-8-9	2d "	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00	.....	.....	.....
350,000	7				1st mortgage.	.....	Eastern Railroad.	.....	936-10	3,345,400.00	.....	663,578.79	282,077.54	\$234,133
740,000	10				2d "	.....	East Ten. & Virginia.	.....	120	3,825,450.00	.....	30,897.30	19,692.30	.....
82,000	10			1869	1st mortgage.	.....	Essex Railroad.	.....	20	700,000.00	.....	.....	.....	.....
400,000	10			1861	1st "	.....	Evansville & Crawf'd'le	.....	109	2,228,657.40	.....	243,970.42	136,061.90	\$133,221.45
200,000				1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,540,000.00	.....	681,162.52	213,837.81	3 pr. cent.
100,000	6				1st mortgage.	.....	Fox River Valley.	.....	33	800,000.00	.....	.....	.....	.....
100,000	6				1st "	.....	Fair Haven Branch.	.....	15	300,000.00	.....	50,321.33	14,822.45	\$166,240.00
300,300	6 1-9				1st "	.....	Georgia R.R. & Banking Co.	.....	233	4,156,000.00	.....	1,068,202.59	357,689.42	\$166,240.00
4,000,000				1858	1st "	.....	Grt Falls & Conway R.R.	.....	90	2,737,69.00	.....	27,376.69	14,307.07	.....
2,000,000				1869-70	1st "	.....	Grt West'n R.R. of Can.	.....	281 1/4	4,191,550.00	.....	2,068,836.00	.....	8 pr. ct.
1,812,000	7			1860	1st "	.....	Housatonic Railroad.	.....	74	2,000,000.00	.....	339,196.50	176,529.93	.....
12,855,000	7			1875	3d mortgage.	.....	Hudson River.	.....	29	4,000,000.00	.....	1,924,322.44	718,037.40	.....
4,115,000	6			1875	1st "	.....	" " "	.....	144	4,000,000.00	.....	.....	.....	.....
3,000,000	7			1876	1st "	.....	Illinois Central R. R.	.....	117 1/4	18,433,376.00	.....	1,476,035.27	1031,493.08	7 pr. ct.
000,000	7			1860	Freeland.	.....	" " "	.....	704	3,558,376.00	.....	.....	.....	.....
700,000	7	Nov. 1.			1st mortgage.	.....	Indiana Central.	.....	48	72 4-	.....	354,871.00	.....	3 pr. ct.
50,000	7	Jan. & July 1		1862	1st "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
700,000	7				1st mortgage.	.....	Iron R. R.	.....	13	123,700.00	.....	.....	.....	.....
					1st "	.....	Kentucky Cen. 2d Div.	.....	.....	719,500.00	.....	.....	.....	.....
					1st "	.....	Knoxville & Kentucky.	.....	32	166,000.00	.....	.....	.....	.....
					1st "	.....	Laurens (S. C.) R. R.	.....	184	.....	.....	23,233.59	14,233.59	.....
					1st "	.....	Louisville & Nashville.	.....	12 3/5	300,000.00	.....	50,234.71	14,149.13	\$8,000
					1st "	.....	Lowell & Lawrence.	.....	15.	2,697,090.00	.....	587,236.57	.....	10 pr. ct
					1st "	.....	Mad River & Lake Erie.	.....	.....	2,697,090.00	.....	.....	162,277.50	.....
					1st "	.....	Manchester & Lawrence.	.....	26	1,000,000.00	.....	.....	.....	\$34,000
					1st "	.....	Maricetta & Cincinnati.	.....	17 1/2	.....	.....	.....	.....	.....
					1st "	.....	Mexican Gulf R. R.	.....	27	.....	.....	.....	.....	.....
					1st mortgage.	.....	Milwaukee & Horicon.	.....	30	.....	.....	.....	.....	.....
					1st "	.....	Mineral Point R. R.	.....	32	.....	.....	.....	.....	.....
					1st "	.....	" " "	.....	32	.....	.....	.....	.....	.....
					1st "	.....	Mobile & Ohio.	.....	497	10,000,000.00	.....	253,498.96	162,802.24	.....
					1s mortgage.	.....	Nashua & Lowell R. R.	.....	15	600,000.00	.....	193,752.42	55,501.74	7 pr. ct.
					1st "	.....	New Haven & Northm'tn	.....	55	925,500.00	.....	.....	.....	2 pr. ct. 6m
					Con. till 1859.	.....	New York Central.	.....	85 3/4	23,067,400	14,763,897	7,707,348	3,609,481	3 pr. ct. 6m
					1st mortgage.	.....	" " "	.....	102 1/2	6,717,100.00	.....	1,040,593.26	.....	.....
					2d "	.....	N. Y. & Harlem R. R.	.....	25	.....	.....	.....	64,678.71	\$37,692.30
					1st "	.....	N. Y. Prov. & Boston.	.....	50	1,58,000.00	.....	245,713.00	51,544.40	.....
					1st "	.....	N. Lon. Willm'tn & Pal.	.....	66	1,700,000.00	.....	120,571.50	.....	\$25,000
					2d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
					1st "	.....	Pontchartrain R. R.	.....	6	500,000.00	.....	116,785.00	366,118.80	7 pr. ct.
					1st mortgage.	.....	N. O. Opel'o's & Gr. West.	.....	62 1/2	6,00,000.00	.....	1,007,666.48	.....	.....
					2d "	.....	N. Y. & New Haven.	.....	103 1/2	3,000,000.00	.....	.....	.....	.....
					3d "	.....	North Western Va. R. R.	.....	.....	.....	.....	.....	.....	.....
					1st mortgage.	.....	" " "	.....	.....	.....	.....	.....	.....	7 pr. ct.
					1st "	.....	Northern (N. Y.) R. R.	.....	118	2,000,000.00	.....	600,000.00	.....	.....
					2d "	.....	North Missouri R. R.	.....	19 1/2	.....	.....	55,176.74	88,458.56	2 1/2 pr. ct.
					3d "	.....	Norwich & Worcester R.R.	.....	60	2,111,500.00	.....	304,236.33	.....	.....
					1st mortgage.	.....	Ogd'nsb'g, Clay't'n & Rome	.....	94	500,000.00	.....	229,690.10	137,875.93	5 pr. ct.
					1st "	.....	Ontario, Simcoe & Huron	.....	88 3/4	2,937,500.00	.....	276,539.02	.....	.....
					2d mortgage.	.....	Orange & Alexandria R.R.	.....	47	1,500,000.00	.....	.....	.....	6 pr. ct.
					1st "	.....	Peoria & Bureau Val. R. R.	.....	.....	.....	.....	.....	.....	.....
					1st "	.....	Philadelphia & Trenton.	.....	28 1-5	1,000,000.00	.....	.....	.....	.....
					1st "	.....	Portsmouth & Concord.	.....	47	.....	.....	.....	.....	.....
					1st "	.....	Potsdam & Watertown.	.....	76	2,000,000.00	.....	.....	.....	.....
					1st mortgage.	.....	Rutland & Washington.	.....	62 1/2	950,000.00	.....	68,525.42	.....	.....
					1st "	.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00	.....	.....	.....	.....
					1st mortgage.	.....	Salem & St. Louis R. R.	.....	16882	400,000.00	.....	.....	.....	.....
					1st "	.....	Sud'sky, Mansf'd & Newk	.....	116	.....	.....	.....	19,050.64	.....
					2d "	.....	Sullivan Railroad.	.....	26	500,000.00	.....	75,246.06	17,378.08	11m. 12 pr. ct
					1st mortgage.	.....	Tennessee & Alabama.	.....	145	.....	.....	39,586.44	.....	.....
					1st "	.....	Terre Haute & Richmond	.....	73	1,294,450.00	.....	.....	.....	.....
					1st mortgage.	.....	Toledo, Wabash & Western	.....	242	1,000,000.00	.....	.....	.....	.....
					2d "	.....	Troy & Boston.	.....	.....	.....	.....	.....	.....	.....
					3d "	.....	" " "	.....	.....	.....	.....	.....	.....	.....
					1st, 2d, 3d "	.....	Vicksburg & Jackson.	.....	46	3,000,000.00	.....	322,048.60	165,076.04	2 pr. ct.
					1st "	.....	Virginia & Tennessee.	.....	215	165,000.00	.....	.....	.....	.....
					1st mortgage.	.....	Westchester (Pa.) R. R.	.....	31	.....	.....	.....	.....	.....
					2d "	.....	Wilmington & Manchester	.....	171	.....	.....	.....	.....	.....
					1st mortgage.	.....	Winchester & Potomac.	.....	32	.....	.....	.....	.....	.....
					2d "	.....	Worcester & Nashua.	.....	45 69.	.....	.....	.....	.....	.....



By the Governor. A. G. CURTIN,  
*Secretary of the commonwealth*



## IRON AND STEEL.

BY CHRISTOPHER BINKS.

CONTINUED.

## III.—What the Examinations of some known Processes of Conversion would appear to indicate.

The searcher for information among the steel-makers and steel-workers will speedily find abundance of instructive and suggestive facts, the careful study of any one of which may possibly give him the clue he seeks for. Let him, for example, in the first instance, carefully examine the phenomena involved in the very old practice of using ferrocyanide of potassium as an agent of conversion. It is well known that the application of this compound to heated iron instantaneously converts that portion of the metal that is brought in actual contact with it into steel; and that, under a continued contact, the entire mass, as well as merely the surface of any piece of iron, equally undergoes this transmutation. Thus, this agent is used to improve the quality of inferior steel—that is, more completely to effect the conversion of iron into steel; it is also sometimes resorted to to renew or to restore the steel quality of steel tools—for example, of chisels, the repeated heatings and forgings of which have decomposed the steel externally, or to a greater or less depth reconverted it into common iron. It is used more especially to case-harden iron—that is, to give to it an external coating of steel, or to improve soft steel by its more complete or perfect conversion superficially. This ferrocyanide of potassium is a carbon compound, containing, in its anhydrous form, no oxygen, and, doubtless, it would be on some theory of its carbon-giving agency, that its application (could we possibly trace the origin of it) to iron was first made. But, besides carbon, it contains also iron, nitrogen and potassium. Its formula is,  $K_2 Fe Cy_3$  (or  $3 NC_2$ ).

Now, the specific action of this re-agent, or the cause of its producing this singular effect—the instantaneous conversion, at the points of contact, of iron into steel—might, *a priori*, be held to be due to one or other of the following kinds of reactions:

1. To the reduction of some portion of the carbon of the re-agent, and its being taken up by the hot metal, with the usual result of such a combination, as viewed on the old theory of what steel is.

2. To a deposition upon the surface of the hot metal of a thin film of the pure iron, combined in some peculiar proportion or manner with the pure carbon, both of which exist in this re-agent itself.

3. To some peculiar action of the potassium present in the re-agent; or,

4. To some peculiar action of the nitrogen of the re-agent, or of that element and its associated carbon existing there in form of cyanogen.

For merely preliminary trials or indications let there be selected some ready method of determining which of these elements or combination of them plays this part of conversion; and, for this purpose, let these be taken as the test—the formation or the nonformation upon the surface of soft iron of a case-hardened surface, or of a superficial coating of steel as the result of an application to the iron of one or other of the following re-agents—the relative hardness of the surface being determined by the file test, and after tempering by dipping the hot metal in water in the usual manner, and this, together with the color test,

that is, the development of the series of colors under different degrees of heat peculiar to steel, being taken as the test of its formation.

Let the kind of iron that is selected be the best and commercially the purest malleable iron, such as would be chosen for conversion into the best steel.

The manner in which the writer proceeded in these trials was as follows: Little bars of this iron were made red-hot in a porcelain tube, and then the re-agent was washed over or sprinkled upon its clean surface, or the gaseous or volatile matter (when such was used) was passed through the tube holding the red-hot bars. When the charcoal experiment was made, freshly made and pulverized boxwood charcoal was selected: this made red-hot to expel all adhering azotised or other gaseous matter; then quickly transferred to the tube, the rod of iron imbedded in it, and the two ends of the tube closed. When to this last arrangement atmospheric air was added, the ends of the tube, placed horizontally, were left open, and the air, by diffusion, or by a quiet interdiffusion, found its way into and within the body of the charcoal, and, of course, into contact with the heated iron.

It is needless to point out that this line of experimenting is calculated to obtain, and aims at obtaining only very broad indications of reactions and effects, for the iron used is only approximately and not absolutely pure. But the indications of the special action of each re-agent on its application to the iron are so marked and distinctive, and develop themselves so broadly under the above system of testing, that this method of detecting the reactions, though not absolutely unqualified in its accuracy, is sufficiently tangible for its intended purpose, and lies within the reach of every one. It will be seen how, in following up this investigation, for those comparatively rude methods there are substituted others aiming at great precision, which will appear in a subsequent chapter. The temperature under which the following several re-agents were applied to the iron was that of a full red heat, or that usually employed in case-hardening, or in the cementation process of conversion. Let any experimentalist proceed in this manner to apply to heated iron the following special re-agents, and he will find:

1. That heated iron exposed to the action of pure carbon, and kept out of reach of contact with any other element, is not converted into steel. A small rod of the malleable iron packed in boxwood charcoal in the closed porcelain tube, and kept at full red heat for 12 hours, did not, after being tempered, show a hard steel surface, nor did it exhibit, under high and different degrees of heat, the play of colors peculiar to real steel. It still remained malleable iron.

2. But that when atmospheric air is admitted to such an arrangement in such quantity only as still to keep the carbon in excess, then, in the first instance, the surface of the iron, and finally (if the time of contact be long enough) the whole of the iron is converted into steel.

3. That the application to the iron of gaseous nitrogen does not produce steel.

4. That neither does the application of carbonic oxide give steel.

5. That the application to the iron of a hydro-carbon (as when olefiant gas is passed through the tube, or when the red-hot rod is dipped in oil containing no nitrogen) does not produce steel.

6. But that the application of olefiant gas

mixed with ammonia, or the application of gaseous cyanogen, produces steel, as does also the dipping of the hot metal into a nitrogenized oil, or fat.

7. That the application of ferrocyanide of potassium (as has been so long known) gives steel.

8. That, equally with the ferrocyanide, does the application of the simple cyanide of potassium result in the production of steel; therefore, it is not to the iron contained in ferrocyanide that the steel-making property of the latter salt is due.

9. That potash applied to the hot iron, or keeping the hot iron in contact with the vapour of potassium does not yield steel.

10. That with iron of the kind that has so far been referred to and used (*i. e.*, commercially pure wrought iron, containing no material proportion of carbon), the application to it of ammonia, or of nitrate of ammonia, fails to produce steel.

11. But that the application of ammonia, or its muriate, to iron containing a considerable proportion of carbon, results in its conversion into steel.

These results tabulated, and the composition of the re-agents expressed in formulæ, will better exhibit the inevitable deductions to which they lead.

- |  |              |
|--|--------------|
| (1.) $Fe + C$ (in excess), every other element excluded,     | Leaves iron. |
| (2.) $Fe + C$ (in excess) + (atmospheric air),               | Gives steel. |
| (3.) $Fe + N$ (gaseous nitrogen),                            | Leaves iron. |
| (4.) $Fe + C O$ (gaseous carbonic oxide),                    | Leaves iron. |
| (5.) $Fe + H_4 C_4$ (olefiant gas),                          | Leaves iron. |
| (6.) $Fe + H_4 C_4$ (in excess + $N H_3$ (ammonia)),         | Gives steel. |
| (7.) $Fe + N C_2$ (cyanogen),                                | Gives steel. |
| (8.) $Fe + K_2, Fe Cy_3$ (ferrocyanide of potassium),        | Gives steel. |
| (9.) $Fe + K, Cy$ (cyanide of potassium),                    | Gives steel. |
| (10.) $Fe + KO$ (potash),                                    | Leaves iron. |
| (11.) $Fe + K$ (potassium),                                  | Leaves iron. |
| (12.) $Fe + NH_3$ (ammonia),                                 | Leaves iron. |
| (13.) $Fe + NH_3 Cl$ (sal ammoniac),                         | Leaves iron. |
| (14.) $\frac{95}{95} \frac{5}{5} Fe + C + NH_3$ (ammonia)    | Gives steel. |
| (15.) $\frac{95}{95} \frac{5}{5} Fe + C + NH_3$ (salammon's) | Gives steel. |

Now, out of a consideration of these preliminary and merely guiding trials, besides the other deductions they lead to, as those have been already stated, there is made apparent one significant fact, namely, the invariable co-operation, so far as these trials extend, of both nitrogen and carbon in the production of steel; but these co-operating in some manner yet to be defined and ascertained. It still remains to be determined if this co-operation of nitrogen be a necessity in steel-making, or if the apparent invariableness of its presence and co-operation will, on further examination, be borne out by the evidence of every other process; and if so, is it that the nitrogen, conjointly with the carbon, forms some combination with the iron and remains there; or, that the nitrogen acts merely as an intermediate agent, and that it still remains a chemical fact that steel is merely iron combined with carbon only, though nitrogen plays an essential part in effecting that combination?



#### IV.—Other Evidences of Presumptive Co-operation.

But, whatsoever may be the functions in steel-making that are exercised by nitrogen—if its office be functional at all, and its presence be not a mere coincidence in every case—the fact of its invariable co-existence with carbon, whenever steel is produced, is incontrovertible.

We have it in the old ordinary cementation boxes, which, filled with charcoal and the imbedded iron, are closed but not hermetically sealed, and still sufficiently open to the inevitable permeation, through the excess of carbon, of atmospheric air, yielding, by its oxygen, carbonic oxide, and to the steel, nitrogen. We have it still more especially and obviously when, in this cementation process, there is superadded to the charcoal some horn, or leather shavings, or animal charcoal, along, sometimes, with an alkali—a very old, but not generally used modification. We have it when the iron for conversion is exposed in close vessels to the action of coal gas, but in which coal gas, to greater or less extent, there is always present either cyanogen or ammonia, or both. We have it also in all the multifarious expedients of the steel-workers and steel toolmakers, resorted to to give increased hardness to the metal—that is, to effect its more complete conversion into steel; as, when the filemaker coats his file, before tempering it with a composition of cow-dung or with pig-flour—two favorite specifics, and both highly azotised substances, which he thinks useful merely for protecting the sharp angles of his cuttings from the action of the fire, but which also act, in reality, in more completely steeling his finished work. We have it in the use, in so many bases, of horn shavings, or horn dust, of leather shavings, and of other animal, and consequently azotised matters of various kinds; in the use of other vegetable substances (besides that just mentioned) containing large proportions of gluten, and consequently of nitrogen; in the use of the ammoniacal salts, to say nothing of the prussiates, the recognition of the potency, and of the great value of which for steel-making in bulk, as well as for merely hardening it superficially, as heretofore, is now becoming general.

We have a conspicuous instance of the effect of the presence of this element in a well known fact, that whilst the dipping of the hot metal into olive oil fails, the use of beef suet (an azotised fat) succeeds in giving to the iron a coating of steel.

It was the presence (but to him the unconscious one) of this same element that gave to the celebrated expedient of Mr. Heath its chief potency in improving the quality of inferior steel, and not solely to any purifying or alloying action (if any) of his manganese; for latterly Mr. Heath used coal-tar, placed in contact with the steel, to reduce his manganese oxide; and this coal-tar is a highly nitrogenized as well as a carbonized compound. In short, in whatever practise the various and continual trials of the steel artizan may result, in his searchings after the best hardening agents (and he resorts to the most extraordinary things), that practise will be found invariably, when successful, to involve the employment of some material in which nitrogen is an essential element.

#### V.—Some Evidences of Analysis as to the Real Composition of Steel.

A review of the above facts and phenomena is provokingly suggestive that the existing

theory of the composition of steel is a wrong one. And the first suspicion is that this nitrogen element does actually enter into and exist in that compound, and that not to errors in analysis, but to misconceptions, when nitrogen was found in steel, or to the influence of pre-conceived notions, is to be attributed the fact of this element exercising any kind of agency in steel-making having hitherto been overlooked; or that its presence, when found, has either been disputed or attempted to be accounted for on other grounds than that of chemical combination.

The attention of the chemical world was first prominently called to the fact of the existence of nitrogen in iron and steel by Professor Schafhaüt, a translation of whose paper appears in the *Philosophical Magazine* for 1840. Now, about this period there had arisen some of those new methods in analysis for finding and determining the quantity of nitrogen that, added to subsequent discoveries in the same direction, have given so happy an impulse to analytical chemistry. The method of Dumas, of Schafhaüt himself, of Will and Warrentap, and of Lassigné, were about this time brought into notice, and Schafhaüt, without appearing to have in his mind any theory as to the part played by nitrogen in the composition of steel as distinguished from iron, but knowing that nitrogen was ever present in the manufacture of iron, would appear to have tried his hand at its analytical detection. His results are given with a broadness and absence of specific details that suggested a repetition of them by the next investigator, Professor R. Marchand, whose essay will be found in the *Chemical Gazette* for 1850, the latter chemist applying, with considerable ingenuity the resources of a still more advanced chemistry in refutation of some of the results of the former. To give a still greater zest to such investigations, it had just then been discovered by Wohler that those beautiful copper-colored cubic crystals found in the slags of the blast furnaces, which we had been accustomed to call titanium, were none other than a mixture of cyanide and of a nitruet of that metal—a fact suggestive enough that in iron, too, there might, not improbably, be discovered some analogous combinations with nitrogen. Schafhaüt gives as his results that malleable cast iron contains 0.532 of nitrogen, close-grained cast iron 0.927, coarse-grained cast iron 0.740, white pig iron 1.200, and that in Bienhaüt's razors there is 0.532 of nitrogen. Marchand asserts that these proportions are too high, but admits the invariable presence of nitrogen in cast iron, and its equally invariable absence in malleable iron. Speaking of that method under which the existence of the nitrogen is proved by the formation of Prussian blue, he says that "with steel powder (as compared with cast iron) it was still more striking, and with soft iron it was never apparent." But it is to be observed that it was with cast iron chiefly, and not with steel, that Marchand operated; still he detects in this cast iron the invariable presence of nitrogen, and in pure iron its invariable absence. Neither of these chemists speculated as to the meaning or the effect of the presence of the nitrogen in steel; wherever in the exercise of their manipulatory skill it is found, the fact is left without comment or consideration. Had the comparisons been made with pure steel, as compared with pure iron, there can be no doubt that Marchand would have recognized those marked distinctions which it is the object of the writer to point out.

Now, suspecting less from such evidences or suggestions as these than from the facts to be observed on conversions (such as that of the singular influence of cyanogen compounds) the substantial and invariable existence of nitrogen in steel, the writer proceeded to arrive at that point as follows: The best malleable iron on the one hand, and by way of comparison with this, the same kind of iron fully converted, by the usual process, were taken on trial; the steel was dissolved in very dilute and pure hydrochloric acid, and after many trials it was found best to place the bar of steel or iron in single voltaic arrangement with platinum, and to effect the solution in the cold with the usual precaution of expelling air from the water employed. In this way, slowly, the steel was dissolved, and the carbonaceous flocculent matter that was left collected, carefully dried, and analysed. The iron was treated in the same manner, and the comparatively very small proportion of carbonaceous residue given by it also examined. And these were compared with the residue obtained also from cast iron. If the acid be strong and the heat be used, and the voltaic arrangement be not used, the results are very different. Gaseous nitrogen, in very minute quantity, is given off along with the hydrogen, some muriate of ammonia is formed in the solution, and but little nitrogen left in the residue.

Effecting the combustion of each of these residues by aid of the soda lime process, in the usual manner, the following results were obtained: 1. The residue from the malleable iron contained no nitrogen whatever. 2. That from the cast iron always showed the presence of nitrogen, but in very minute and variable quantities; an average of results would seem to confirm the analysis of Marchand. 3. In the steel residue there was invariably detected a considerable quantity of nitrogen.

The analysis of this carbonaceous residue gave—C=0.63, N=0.24; impurities, 0.13=100. The direct analysis of this sample of steel, using the soda lime process, gave in 100 parts of steel C=0.68, N=0.19; that is, every 100 parts of steel contained about one-fifth per cent. of nitrogen associated with about three times its weight in carbon. The proportion of nitrogen in the residue was greater than in the steel itself—a result proved afterwards to be due to the absorption of nitrogen or the formation of ammonia in the act of drying the residue. The direct analysis of the malleable iron gave no nitrogen whatever—that of the cast iron only a trace. This steel contains, therefore, about one-fifth per cent. of nitrogen, and by other trials good steel always gives about this quantity, but inferior steel much less. It is obvious that the residue is an azotised carbon, out of which fact arise some important considerations. But, confining these, for the present, to the cases of the malleable iron and the steel, it would appear that the difference in chemical composition between these two is not less remarkable than the difference between their respective physical properties; but in what precise manner these two elements, carbon and nitrogen, produce these differences, or the form in which they exist together in the steel, we can only, as yet, conjecture theoretically.

TO BE CONTINUED.

✂ The third instalment on the capital stock of the Allentown Railroad Company, is advertised, payable August 12.



## ANDROSCOGGIN &amp; KENNEBEC RAILROAD.

## DIRECTORS' REPORT.

To the Stockholders of the Androscoggin and Kennebec Railroad Company.

The Directors respectfully report the present state and condition of the Company and the operations of the Road during the year ending May 30th, last.

A railroad company as a common carrier must, as a general rule, lose or gain in its business operations as the business of the people which the road is designed to accommodate is prosperous or depressed.

Your road is subject to this general law.—For the first six months of the last year the earnings of the road show an increase of \$3,393.57 over the corresponding months of the previous year. During the last six months of the year and particularly during the months of January, April and May, there has been a diminution of the business done over the road, and a consequent decrease of the earnings of the line, as compared with the earnings of the two roads in the corresponding months of the year previous.

The net earnings of the first six months were \$63,415.49, and of the last six months, after paying to the Penobscot and Kennebec Railroad Company their proportion of the earnings under the lease, have been \$44,271.70, amounting for the whole year to \$107,687.19, and showing a loss as compared with the net earnings of last year of \$2,112.09.

It has been a year of great depression of business in this State, especially the last six months, and the prosperity of railroads and their value in the future is greatly dependant upon the question, whether business in this State shall revive and assume its former activity or whether it shall continue to sink to a lower depth of depression.

Through its connection with the Grand Trunk Railway it forms the only route between the Eastern and Western portions of the State, and requires nothing but a revival of business along its line and at its termini to make it capable of paying some return to the Stockholders.

For the condition of the Company financially we refer you to the report of the Treasurer. From this the floating debt still appears to be larger than it ought. Had the bonds created the last fall been fully taken up by the Stockholders and the business of the road kept up to its former amount, the company would now have been comparatively free from the embarrassment of a floating debt. Among the assets of the Company as stated in the report of the Treasurer, it is proper to say, that the items of "Fuel and materials for repairs on hand," are not available for the payment of the debts of the Company, as they will be required for consumption in operating the Road—nor can the stock of the Penobscot and Kennebec Railroad Company, owned by this Company, amounting at its cost to \$21,900, be relied upon for that purpose, at present.

The greater portion of the attention of your Directors for the last year, as well as in former years, has necessarily been devoted to the financial concerns of the Company. They can see no other practicable way of funding the floating debt of the Company than the one recommended to you and adopted at your special meeting, held at Winthrop in October last.

The following is the financial statement of the Company as given by the Treasurer.

To Capital Stock .....	\$470,951 66
BOND ACCOUNT.	
Million Loan Bonds .....	1,000,000 00
Interest, Bonds .....	24,600 00
Bonds of \$200,000, and 350,000 Loan .....	33,000 00
Stock Bonds, convertible into Stock in about 7 years .....	685,700 00
Stock Coupons .....	12,680 00
Sundry Accounts, payable in Stock & Stock Bonds .....	3,038 20
Bills Payable .....	37,730 89
Bills Audited and Approved .....	14,634 24
Interest .....	6,501 02
Income Account, being for Wood and materials for repairs on hand .....	32,328 77
	\$2,321,274 78
By Construction Account .....	\$2,210,947 28
Androscoggin R. R. Co. Bonds .....	8,000 00
Pen. and Ken. R. R. Co. Stock .....	21,924 79
Bills receivable .....	4,733 08
Million Loan Bonds on hand .....	23,100 00
Wood and materials for repairs .....	32,288 77
Cash .....	7,242 94
Amount due from Stations .....	11,260 42
Amount due from P. O. Department .....	1,677 50
	\$2,321,274 78

## The Liabilities of the Company are;

Bills Payable .....	\$37,730 89
Overdue Bonds .....	33,000 00
Bills audited and approved .....	14,634 24
Unliquidated Claims .....	6,000 00
Interest, (estimated in part) .....	6,501 02
	\$97,915 26

## Assets:

Cash on hand .....	\$7,242 94
Bills Receivable .....	4,733 08
Amount due from Stations .....	11,260 42
Amount due from P. O. Department .....	1,677 50
Wood on hand .....	32,288 77
Materials for repairs on hand .....	9,763 00
Million loan bonds .....	23,100 00
Androscoggin R. R. Bonds .....	8,000 00
Pen. and Ken. R. R. Co. Stock .....	21,924 79
	\$110,327 60

WASHINGTON COUNTY R. R., TEXAS.—The Brenham Enquirer says this road is progressing well, and that the contract to grade and cross-tie that part east of the Brazos (some six or seven miles) has been taken by responsible parties. The estimated cost, when complete, is \$20,000 per mile, or \$400,000 for the 20 miles from Brenham to its connection with the Houston R. R., about one mile from Hempstead. To meet this cost, the Company have the State loan of \$6,000 per mile, or \$120,000. One half of the cost of grading and cross-ties is paid in stock, which amounts to \$100,000; these two amounts deducted, leave only \$180,000 to be raised in cash. The value of the land bonus of 10,240 acres per mile is estimated at 60 cts. per acre, which at this low estimate, amounts to \$102,400 more, and this deducted, leaves but \$77,600 cash outlay by the Company, for the entire road. The whole stock of \$400,000 being divided into shares of \$100 each, it therefore follows, that the cost of each share will be only \$19.40. To prove that the people of Washington county are well able to build this road without even a feeling of inconvenience, it is shown that the whole cost divided between the 1,200 voters, will be but \$64.66½ for each voter, and taking the entire population, it would probably not amount to more than \$5 or \$6 each. But this only proves what the people can do everywhere, when they choose to act together and in a body.—Galveston News.

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees. July 14, 1857. Jy23-1m

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
59 South William street, N. Y.

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
Jy30 No. 66 Broadway, N. Y.

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPEEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. Jy9-2m

## SILVER, GOLD, LEAD, And Other Minerals.

## ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the Sonora Exploring and Mining Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Agent for the Company,  
Old Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FRIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

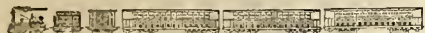
WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

Sup't Terre Haute &amp; Richmond R. R.

## PAGES

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Washington in.....	28 "
To Steubenville in.....	29 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

Jy17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-huses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-huses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

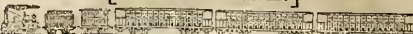
Ag't Cin. and St. Louis Omnibus L  
Office No. 2 Burnet House.

1856.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:30, 4 and 6:30 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities. Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M., INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M., MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburgh, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via. Clyde through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:30 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:30 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8 A. M., and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:46, 5:15 and 10:25 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for North, South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntington, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

L. N. ANDREWS, Gen. Frtght Ag't.

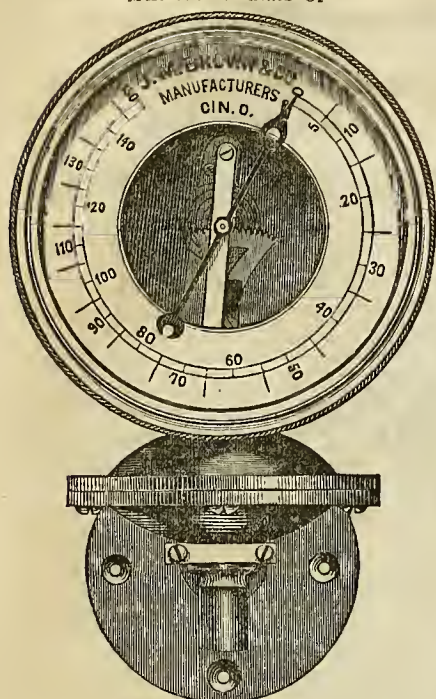
Indianapolis, Sept. 16, 1856.

[mh29-1y.]



# M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

### FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics of the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front Street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

### Every article necessary to DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

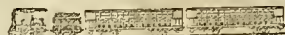


N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
J. 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES.  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

### LOCOMOTIVES.

4,000 Tons rails, 38 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.] J. H. GOODMAN & CO.,  
No. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS. DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS OF

Plain and Figured Mohair Plush.

Printed & Unrent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width.

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation.  
scpi8 DOREMUS & NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

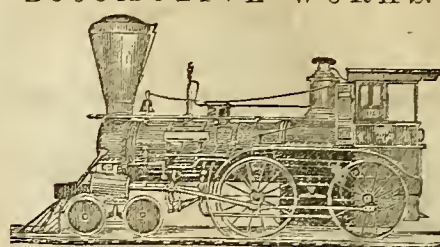
Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitters

Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS.

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows, Passenger, Freight Car, and Switch Locks, Door Knobs and Bolts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.  
†ocf.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

## Sole Manufacturers of McGowan's Double Action SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Gardeo Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

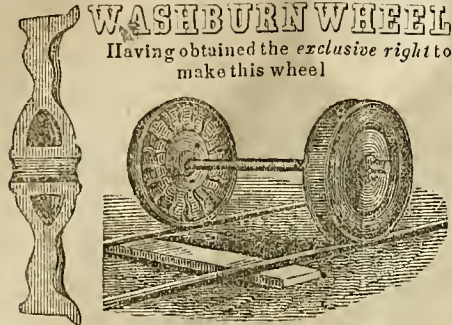
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEAL. (The highest prize) awarded to these pumps at Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.,

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,

Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escapo Pipes, Cylinder Heads and Jackets

Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,

Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Truck Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checkers, Freight Trucks,  
**CAR FINDINGS,**

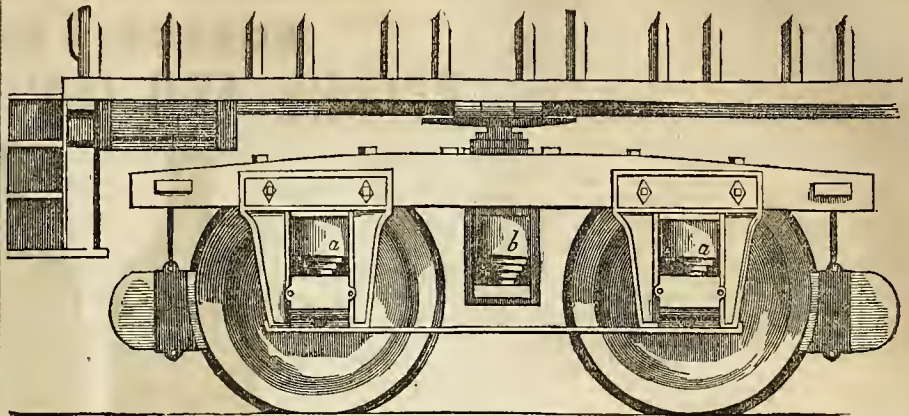
Also, Superior Car Finding Upholstery, Mounting, &c.

\*Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED.

oc23-1y

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT... M. D. WELLMAN... C. M. RU S

## DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th JOSEPH DAVENPORT.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description,

Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight-wheeled Gravel Cars.

We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chill. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.  
Jan 1.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars

Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1 n24 NEWARK, N. J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
Robert Harris, Sup't.  
Racine, May 15, 1857.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [Jan-17] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

I. A. A. C. R. TRIMBLE,  
Consulting Engineer,  
118 Park St., Baltimore.

je4

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

## RHINELANDER, BOORMAN & CO., RAILWAY AGENTS

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Bauman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie patterns; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-tf 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.**

JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 52d street, N. Y.

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building;

**The Great Arnold Secret Discovered at Last**

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes. **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob ERST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,**  
Iron Founders & General Machinists.

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 258 H Street, Washington, D. C. apr12

**Thorough Bred Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....AUG. 13, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 25.

#### EDITORIAL.

Agricultural Statistics of the North-West.....	397
Illinois Southern R. R.....	397
The Erie R. R. and the Circular of its New President.....	398
Blue Ridge R. R.....	398
Brevities.....	398
Texas Roads.....	398

#### RAILROADS.

Alabama & Florida R. R.....	399
New York & Erie R. R. Circular.....	399
Milwaukee & Superior R. R.....	408

#### MISCELLANEOUS.

To the Stockholders of the La Crosse & Milwaukee R. R. Co.....	393
Earnings.....	393
Discussion on the Joins of Railroads.....	401
Iron and Steel.....	406
Railway Fire Insurance.....	407

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	404
London Quotations.....	405
Monetary and Commercial.....	405
Sales at the New York Stock Board.....	405
Cincinnati Stock Sales.....	405

DAYTON, XENIA & BELFRE R. R.—The Dayton Journal says:

“We understand that surveys of six different lines, from Xenia, and points east of it, have been made to different points on the Marietta Railway. The lines have been run very carefully and complete estimates made of the cost of construction by each route. These surveys and estimates, as we are informed, demonstrate the fact, that by either line the railway can be built at comparatively a low figure.”

ENGINEER.—A Civil Engineer, of considerable experience and ability, writes us that he would like a situation as first assistant on some first-class road, or as Chief Engineer on some minor road. To any road looking for a competent person, this is an opportunity to be suited. Name given on application by letter to this office.

VOL. 5.—No. 25.

### AGRICULTURAL STATISTICS OF THE NORTH-WEST.

We observe in many papers of the country the most exaggerated statements of what may be expected from the forthcoming grain crops. If we were to believe them, we are to have nothing short of a deluge of grain, and the country is to be filled with garnered harvests of wheat and corn. Especially is the North-West to be the great granary of the world—and all mankind are to come to Toledo or Detroit, Chicago or St. Louis, Dubuque or Burlington, to buy corn, as the Israelites went to Egypt. This is very natural when it is considered that we have just passed out of a period of starvation and several years of short crops; and it is now evident we shall have one really good crop. But exaggeration does no good; it does positive evil. The North-West will have a surplus. It always has had. But it will have not half the surplus which some of our fanciful cotemporaries have represented; and that it will not, will be manifest on the consideration of certain facts.

1. All short or large crops are exaggerated. The shortest crop of grain in the West did not fall more than 20 per cent. below an average crop; and the largest one did not rise more than 25 per cent. above an average. If we take for wheat, corn and oats, 25 per cent. advance on an average crop, for the product of this year (1857), we shall come quite up to what may be expected.

2. The North-West, as the great recipient of immigration, both from Europe and the Eastern States, increases faster in population than the whole country. Each annual wave of this immigration has to be fed one year without producing, and this makes a relatively larger proportion of consumers.

3. The North-West has arrived at a period when its civic or town population is increasing at a very rapid rate; and this town population eat without producing. It will be within bounds to say that the town population of the North-Western States has increased 450,000 since 1850. Such a population requires a large amount of breadstuffs.

These facts are enough to show that the ideas entertained of surplus crops in 1857 are in many cases most grossly exaggerated. To set this matter in a true light, and yet give credit to every element of increase, we shall give a series of statistical facts which cannot be controverted, and from which reason may draw certain inevitable deductions:

What has been the actual rate of increase in years past? We have before us the censuses of 1840 and 1850, with the estimates of the Patent Office, and the actual crops of Ohio and Iowa for the several years. These returns will enable us to give very nearly the grain production of the North-West for sixteen years—a period long enough to ascertain the rate of progress in production. In order to avoid the complication of naming each

State, we aggregate the North-West; and by the North-West we mean the States of Ohio, Indiana, Illinois, Michigan Wisconsin and Iowa, six grain-growing States, comprising, in all, about 300,000 square miles, and at the present time nearly seven millions of inhabitants. The following is the first table we give:

	Wheat.	Corn.	Oats.
In 1839.....	26,480,346	88,420,831	28,099,662
In 1848.....	47,800,000	170,000,000	62,000,000
In 1849.....	40,758,906	183,977,249	37,020,070
In 1855.....	60,037,662	282,572,562	56,054,341

Aggregating these results at each period, and we have the sum of three great crops of grain at four different periods during sixteen years:

	Bushels.
In 1839.....	142,990,839
In 1848.....	279,000,000
In 1849.....	263,561,335
In 1855.....	398,664,575

The crop of 1849 was, in the States of Ohio and Indiana, a very poor one. The crops of 1855 were remarkably good. From 1839 to 1849 the aggregate crops of the North-West increased 84 per cent., or 8.4 per cent. per annum. From 1849 to 1855 the crops increased 51 per cent., or 8.5 per annum. This shows a very uniform rate of increase; though if we consider that the crop of 1855 was a remarkably good one, it seems that the rate rather diminished than increased. We see no reason whatever to doubt that about the same ratio of progress in crops will continue for the present. In that case (since the crop of 1855 was a good one) the crop of 1857 will be about 16 per cent. advance on that of 1855. The aggregate of wheat, corn and oats produced in 1857, within the six North-Western States, will be about 464,000,000 (*four hundred and sixty-four millions*) bushels, certainly an enormous amount, but by no means equal to the marvellous statements made by some papers. The distribution will be something like the following:

Wheat, bushels .....	70,000,000
Oats, “ .....	70,000,000
Corn, “ .....	324,000,000

If this crop is produced, then the exports will be very heavy, and the railroads find, for months to come, ample employment for all their machinery.

ILLINOIS SOUTHERN R. R.—A letter from the Engineer of this road says:

“Our survey will be complete by the 15th inst., and as soon thereafter as possible my report will be made up, printed and distributed. Our survey demonstrates the fact that the construction of our road (and, from the enthusiasm manifested along the line, and the liberality with which subscriptions are made, no doubt is left of its speedy completion) will develop the richest mineral and agricultural country in the West. A better road than the Illinois Central can be built on our line for much less money.

Very respectfully, your obt. serv't,  
C. JENNINGS.



# THE ERIE R. R. AND THE CIRCULAR OF ITS NEW PRESIDENT.

Charles Moran, Esq., the new President of the Erie R. R., has issued a manifesto, given in another column, on the abuses of the railroad system. The principal points to which he calls attention are:

1. The resort to agents to sell tickets and to obtain freights.
2. The reduction of the rates of fares and freight, and the alteration of the classification of merchandise and produce.
3. The issue of free passes.
4. Contracts binding companies to sell tickets and to send freight exclusively by one line.
5. The high speed at which the trains are run.

We are glad to see the free discussion of these points started from any source. The *Record* has constantly advocated a line of policy that would make our railroads both safe and profitable investments; and we trust that this manifesto, issuing as it does from a road which has probably done more than any other to create the evils which it now deprecates, will convince others of the folly of the course which has done so much towards the absolute destruction of public confidence in railroad securities. It is but a month ago that the Erie Road was carrying passengers on all its trains at the rate of one cent per mile—*notoriously one-third less than cost*. Indeed there is not a point in the whole list of grievances in which the Erie Road has not been a notorious sinner. We hail, therefore, its circular as the evidence of that penitence which must sooner or later follow every crime, and sincerely trust that the new management of this road will have the firmness to adhere to its present avowed principles.

We insert Mr. Moran's circular entire; but in so doing do not wish to be understood as conceding that the grievances mentioned in it are the only or the greatest evils that affect the management of our roads. They express one type of abuses that should be corrected; but like the tythe of mint, anise and cummin while this is done, the weightier matters of the law should not be left undone. Economy and competence of management should be joined to all attempts at reform.

**BLUE RIDGE RAILROAD.**—Judge O'Neill, writing to the *Newberry Rising Sun*, from Anderson, says:

Yesterday morning, at the instance of Col. Gwinn, the skillful and experienced Engineer of the Blue Ridge Railroad, myself, the bar, and several other gentlemen, rode two miles on the road. It is a good, well executed road. The cut through the town is a great inconvenience, and I think nuisance. It will be found that a deep cut, from thirty to forty feet, in the heart of the town, will be the parent of disease; and I fear this sad result is beginning to be realized. The cost of this road is immense from here to Pendleton (14 miles). It will cost \$30,000 per mile, equal to \$420,000. This is more than one-fourth of the whole original cost of the G. & C. R. R., 164 miles. But, notwithstanding the great cost, this road (the Blue Ridge Railroad), when built the whole way to Knoxville, will

be indeed worth all the money which may be expended on it, even if it should be from twelve to twenty millions.

We cannot conceive how a deep cut on a railroad, well drained, can be either the immediate or remote cause of disease to the surrounding vicinity. If no one dies in Anderson till he is affected by diseases arising from such a source, we predict a very long life to the goodly citizens of that burgh, and would be willing ourselves to emigrate thither without delay.

**IND. & ILL. R. R. Co.**—John C. Campbell, Esq., has been elected President of this company, *vice* Hon. A. L. Roache, who retires on account of ill health. Mr. Roache remains in the Board.

**CHICAGO, IOWA & NEBRASKA R. R.**—The grading on this road from De Witt to the Wabesipinicon River, 12 miles, is finished, and the workmen are laying the ties and iron. The work of grading on the balance of the road is also progressing rapidly. One year ago the surveys of the portion now nearly finished, were not completed.

**LAGRANGE AND TRENTON R. R. COMPANY.**—At a meeting of the incorporators of the Lagrange and Trenton Railroad Company, held at Lagrange, July the 17th, 1857, the following named gentlemen were present, viz: J. B. Hay, Thos. Richardson, J. M. Cashman, P. P. Cluff, J. A. McKoon, J. H. Talbot of Louis county, E. V. Wilson and P. Bruce Linville of Knox county.

Dr. J. A. Hay was elected President of the road, and John H. Talbot, Secretary.

**TEXAS ROADS.**—The Houston Telegraph gives the following summary of progress in some of the principal roads of that State.

The Railroad spirit is zealously sustained everywhere. The managers of the various enterprises now before the Texas public are taking advantage of summer leisure, and are pushing their works along with energy. Accounts from the Central road assure us that the grading is being done as fast as possible, though the work at this time is on the worst portion of the line for two hundred miles. The Harrisburg road has eighteen miles graded beyond Richmond. The Henderson road has four miles this side the 25 mile station graded, and fifty hands are at work on the ground. The engineers have surveyed the Houston, Tap and Brazoria road to Columbia, and will proceed with their line to Wharton next week. The subscriptions being taken for the Houston and Sabine road are of a character to indicate the speedy completion of that route.

In addition to the above, the Southern Pacific Rail Road are proceeding rapidly with the grading of the first 70 miles of their line, from the eastern border of the State through Marshall.

From the N. Y. Tribune.

# TO THE STOCKHOLDERS OF LA CROSSE AND MILWAUKEE R. R. COMPANY.

It has been ascertained that it will require eight hundred and twenty-five thousand dollars to complete the railroad to La Crosse, and that that amount will be sufficient for that purpose. About one-half of that amount, or a little more, it is expected will be realized from the proceeds of the first mortgage Land Grant Bonds, of which six hundred and seventy-eight thousand dollars are still subject to delivery, and the remainder it is proposed to raise by offering to the Stockholders, or such as may accept, the following proposition, viz: that any holder of stock be entitled to subscribe for the 8 per cent. bonds to be issued under a mortgage on the Eastern and part of the Watertown division to the amount of one million dollars, to be taken at the rate of 80 per cent., or eight hundred dollars for each bond of one thousand dollars, payable as follows, viz: Four hundred dollars to be paid to the stock of the Company at par at the time of subscribing, and four hundred dollars to be paid in cash by installments, one-quarter at the time of subscribing, one quarter on the 15th day of August next, and the remainder on the 1st day of September next, which will retire in the aggregate \$400,000 of the stock of the Company, and provide \$400,000 in cash funds for the operations of the Company, which, added to the proceeds of the unexpended first mortgage bonds, will give a sum sufficient for the completion of the road to the Mississippi.

Many stockholders, feeling a doubt as to the value of the stock, will thus have an opportunity to convert the stock shares into a 10 per cent. bond income, which will be a certainty, instead of retaining the stock shares, subject to contingencies. The bonds being convertible, will afford at any time the opportunity of reconverting them into stock, in case it should hereafter be found desirable so to do. It gives the present stockholders the option to convert stock into bonds, which, at 80 per cent., gives a 10 per cent. per annum investment and a gain convertible into stock in case the latter should hereafter prove to be the more desirable.

Books of subscription will be opened at the office of the Company in this City, on Saturday next, the 1st day of August, and kept open until the full amount of said bonds shall be subscribed for by those now holding stock, or who may purchase it for this purpose.

BYRON KILBOURN, President.  
New York, Thursday, July 30, 1857.

**MILWAUKEE AND MISSISSIPPI R. R.**—The earnings of the Milwaukee and Mississippi R. R., from July 1 to July 16, 1857, were..... \$48,600  
Same period, 1856..... 36,500  
Increase..... \$16,100

**CHICAGO AND BURLINGTON R. R.**—Earnings of the Chicago and Burlington Railroad for July, 1857:  
Freight. Pass. Miscel. Total.  
July, 1857..... \$134,874.77 \$51,064.17 \$1,955.83 \$187,892.77  
July, 1856..... 131,333.84 46,090.61 2,395.67 179,830.12

Gn, 1857. In. 3,540.93 In. 4,973.50 De. 441.84 In. 8,072.65

The proportion of earnings for each Road comprising the line are as follows:

	Freight.	Pass.	Miscel.	Total.
C. & B. & Q. R. R.	\$109,729.41	\$40,327.85	\$1,595.83	\$151,653.09
G. & C. R. R.	19,580.69	4,554.77	25.00	24,160.46
P. & O. & W. R.	5,564.67	6,181.55	333.00	12,079.22
Total.....	\$134,874.77	\$51,064.17	\$1,955.83	\$187,892.77

In addition to the above, the earnings of the Quincy and Chicago (Cate Northern Cross) Railroad, as returned to the office for July, 1857, are as follows:

For freight.....	\$12,063.23	For miscel's.....	\$61.00
For passengers.....	13,768.08		
For mail.....	833.33	Total.....	\$27,063.14
For express.....	327.50	Earn's, July, '56.	22,143.08

Gain in 1857..... \$3,915.06



## Railroads.

### THE ALABAMA AND FLORIDA R. R. CO.

We give to our readers to-day, with great pleasure, copious extracts from the report of the President of the above Company, whose road extends through Alabama from Montgomery down to the Florida State line, in the direction of Pensacola. We also give extracts from the report of the Chief Engineer of the same road. These combined, speak most favorably of the condition and prospects of the present and future administration of affairs, and promise to the public the connection of New York and the great Lakes with the Gulf of Mexico at Pensacola in 18 or 24 months.

The distinguished President of the road, Ch. T. Pollard, Esq., could well say in his salutation to the stockholders of the Company, that they were assembled in their annual meeting for 1857, under more encouraging prospects for the completion of the road than he had reason to hope would be the case at their last annual meeting.

The wise and liberal policy which he recommends for applying the lands donated by Congress (355,000 acres) to aid in the construction of the road for 50 miles through Conecuh co. in continuation of the Florida road coming up from Pensacola to the Alabama State Line, at once insures the completion of the whole line from Pensacola to Montgomery by the 1st July, '59, if not at an earlier day.

We understand that responsible parties are ready to take the contract for grading, cross-tying, and bridging the entire line through Conecuh county from the termination of the Pensacola road at the State line to Butler county.—The lands will more than supply the iron rails, including machinery, depots, etc.

The intelligent Engineer, Mr. S. G. Jones, truly remarks that—

"The diversion of the travel from the old established route from the South-west to the North-east, is now clearly and painfully perceptible to those whose position impels them to note the change and the improvements in the Railroad connections of the West, within the next twelve months must greatly increase the drain of travel already begun. Our remedy for this evil is the completion of the road, by which, if we do not recover all the travel heretofore enjoyed, we shall gain a new trade and new travel more than sufficient to compensate us for our losses."

This new trade and new travel will be opened to the old Metropolitan route to New York, by the steam communication between Pensacola and Cuba, Texas, Mexico, and California and the Pacific, by the Tehuantepec isthmus.

We commend the whole Report to the careful reading of every one interested in the great road which is to connect Pensacola with the North. In the meantime, want of room compels us to furnish only extracts from it.

Mr. Pollard says:

"If this is done, I feel confident the iron can be obtained by the pledge of the lands granted by Congress to assist in building the road, and that by the 1st of July, 1859, the connection between Montgomery and Pensacola will be perfected.

"Efforts are now being made in Butler county to obtain a subscription of \$50,000 to complete the road from Fort Deposit to Greenville, and if this can be done by the 1st of October, and put in the form of Bills of Exchange, made payable in March and April, 1858; the Board can with such paper and the credit of the Company, purchase the 1000 tons of iron which it will require to lay down the twelve miles of road between Fort Deposit and Greenville.

"If the people of Conecuh county should desire it and will make provision for the estimated cost, I would suggest for your consideration the

propriety of instructing the Board to put under contract the road from the Florida line through the county of Conecuh to the Butler county line, whenever subscriptions to the Capital Stock of the Company can be obtained and put in such form as may be made available for an amount sufficient to cover the estimated cost of grading, bridging and preparing the road for the iron through the said county of Conecuh, and that whenever such a contract is made, the lands lying in said county, that may be acquired under the Act of Congress, granting lands to assist in the construction of the road, be made use of by sale or mortgage, to provide iron and such other materials and machinery as may be necessary to put it in operation—and as the largest portion of these lands, amounting, from the best information I have been enabled to obtain, in the aggregate to 355,000 acres, is situated in the county of Conecuh. I apprehend but little difficulty in being enabled to provide for the purchase of the 4,500 tons of iron which it will require to lay down the road through the county!

"The importation of this iron for the southern section of the road through Pensacola will save to the Company all of eight dollars per ton in the cost of it laid down, and from the rapid progress now making on the road from Pensacola to the Alabama State line, under the energetic management of its able President, Maj. Chase, there is every reason to feel assured that if the southern section of this road through the county of Conecuh was at once put under contract, the Florida road would be completed in time to transport the iron from Pensacola.

"The importance of it can hardly be estimated. If it could be put under contract this coming winter, which I have strong hopes of seeing done, and all that is required for the counties of Butler and Conecuh to do could be accomplished, the whole of the road south of Ft. Deposit could be at once put under contract, and in two years trains would be loaded with coal at the pits in Shelby and Bibb counties, and in 24 hours delivered on the shores of the Gulf, which would do more to develop the value of the coal region of the State than can be accomplished by any other route yet projected."

Mr. Jones reports—

"No material variation was made from the line of original survey until the summit of the ridge dividing Sepulga and Murder Creek was attained. At that point the location was thrown to the right, passing through Evergreen, Conecuh county, and descending into the valley of Murder Creek, which it crosses near Perryman's Bridge, 10 miles above the crossing of that stream on the original survey. The location is then traced down the west bank of Murder Creek to its confluence with Conecuh river, and down that stream to a junction with the Alabama and Florida Railroad, of Florida, at the Florida line.

"The nearest point of approach to Sparta, the capital of Conecuh, is 1½ miles; although the line fails to pass through the county town, it nearly bisects the county, and in that way secures a more equal distribution of its benefits among her citizens, and should hence find more general favor with her people.

"The liberal offer of some of the wealthy and enterprising citizens of the county to grade the road through its limits and furnish the cross-ties for the same, relying entirely on their county subscription for payment, which was submitted to the Board last summer, will doubtless be renewed this, as energetic measures are now being taken to make that subscription commensurate with the deep interest her people feel in the road. The amount required to complete the graduation and box culverts, and furnish the cross-ties through that county, at the prices on

which their proposition is based, will be \$175,000; a small amount for such a county as Conecuh to contribute to an enterprise passing for nearly 50 miles through her borders, costing millions of money, and destined to add so immensely to her growth in wealth and population. Conecuh is essentially an interior county, many of her citizens being from 50 to 70 miles from the nearest market; a Railroad is hence a necessity to her, and now that so little effort is required to secure it, that surely will not be wanting. Transcripts of all the land entries at the offices at which lands along the route of our road were subject to entry, show within the limits of 15 miles on either side of the road, 355,000 acres of land applicable to the grant made by Congress for the benefit of this road, without taking into the account that which, in consequence of entries improperly allowed, will under recent decision of the Commissioner of the Land Office, revert to the Railroad.

"At the most moderate estimate, these lands will be worth to the Company a million of dollars, and if such arrangements be made as to reserve them from market until the completion of the road, a larger sum would undoubtedly be realized from their sale. Few companies have received such a bonus from Government, and if its true bearings on the value of the stock were duly considered and rightly understood, there would be no lack of means to push forward the work to a speedy completion.

"If to this consideration you add the prospect of the connection with Selma by a branch of this road, and so with the coal fields of the State, insuring to the road the day it is opened a business, in the shape of coal freights alone, largely exceeding \$100,000, and which must yearly increase, surely no farther inducements need to be named to secure the requisite additional subscription."—*Florida Democrat.*

### NEW YORK AND ERIE CIRCULAR.

OFFICE OF THE NEW YORK AND ERIE RAILROAD }  
New York Saturday Aug. 1 1857. }

On entering into the duties of President of the New York and Erie Railroad Company, my attention was particularly called to the great errors and abuses which have gradually crept into railroad management, arising principally from the eager efforts made by each road to divert traffic from competing lines to its own. The result is so fatal to the true interests of the stockholders of all railroads, that I have thought it my duty to attract the attention of all parties in interest, to this important subject. Unless a prompt and thorough reform can be introduced, it is probable that nearly the entire amount invested in railroads, estimated at about \$700,000,000, will ultimately prove valueless.

The points to which I would call particular attention are:

1. The resort to agents to sell tickets and to obtain freights.
2. The reduction of the rates of fares and freight, and the alteration of the classification of merchandise and produce.
3. The issue of free passes.
4. Contractors binding companies to sell tickets and to send freight exclusively by one line.
5. The high speed at which the trains are run.

The expenses of employing agents to sell tickets and to solicit freights are enormous, without permanently increasing the traffic of any road, for in general the public in this country are too intelligent, too well acquainted with the different lines of communication and their advantages and disadvantages, to be influenced to any extent by the solicitations of



agents; besides which, as soon as one Company resorts to these means of diverting traffic from other competing lines, the latter resort to the same means to retain it, so that the only results obtained are, a very great addition to the expenses of the different roads, a gradual reduction in the rates of fares and freights, and the diversion of the time and attention of the officers and employees of the road from the true interests of the Company. This system of employing agents has also led to criticisms and remarks on the merits of the different lines, which have gradually been introduced into the hand-bills of the different Companies, creating ill-feeling between them, which prevents a harmony of action on subjects of common interest, to the great injury of the stockholders. It has also become customary for one Company to pay the employees of other Companies for their influence in directing the traffic of their respective roads, a most injurious expenditure for all concerned; for I have no doubt that there are many persons in the employ of Railroad Companies, who receive pay for their influence from more than one competing line. If this be the case, it will surely be seen how useless the expenditure is to both competing lines who subsidize them.

The natural effect of all this is to gradually weaken the moral principles of the employees of Railroads, for if they see their companies resort, through their agents, to trickery, subterfuge and bribery to secure the traffic, they are soon led to believe that deception is not dishonorable if successful, and they end by practicing it themselves whenever their own interests are antagonistic to those of the Company, and unfortunately to short minded persons who forget or disregard the consequence of a wrong action this antagonism of interest exists in all the relations between a Company and its agents, for the latter in general seek to obtain the greatest possible remuneration by every means in their power, in exchange for the least possible services. The interests of stockholders will thus be generally sacrificed to those of the employees, if the very highest standard of morality and justice be not set them by the Companies in their dealings with each other and the public.

Contracts by Railroad Companies to sell tickets or to forward freight only by one of two or more competing lines, appear to me so evidently unjust, so contrary to the true interests of all Railroads and of the public, and so opposed to the principles of common law regulating common carriers, that I cannot see how they can have been entered into, or how they can continue to be kept in force. They will invariably lead to the employment of agents by the roads injured by such contracts to counteract their effects. All such contracts should at once be abrogated by common consent of all parties in interest, and the public be allowed to choose by what roads they will travel or ship their goods or produce.

The issue of free passes over the different roads cannot be defended on any ground whatever. They are as gross an act of injustice towards those members of the community who do not obtain them, as toward the stockholders of the different Companies who have contributed to capital employed in the construction of the Roads, which have proved so useful and so profitable to the community at large, but so ruinous to the unfortunate stockholders. At the commencement, free passes were, undoubtedly, issued only to men who had rendered

services of some kind or another, to the Companies issuing them; but as no rule can guide their issue, the introduction of the system in favor of those who had some claim on the Companies, gradually led to its being availed of by every one who had any means or pretext of approaching an officer of a Company and sufficient assurance to make the request of him. That there can be no guide to an officer of a Company, in this issue of free passes, is very evident. If it be expedient to give a free pass to the editor of an influential paper, having a large circulation, upon what ground can it be refused to the editors of papers having less influence and less circulation? If it be expedient to give free passes to the principal proprietor of a leading hotel, shall it not be given to his junior partners, and to the proprietors of all other hotels? If a merchant sends traffic, producing \$5,000 income to the Company, and is, therefore, judged to be entitled to a free pass, upon what ground will it be refused to a merchant whose traffic is \$4,500 per annum, and so on, *ad infinitum*, until it reaches the man whose traffic produces but \$50 per annum, and even the clerks of parties who influence traffic, so as to ensure the influence of the latter over their employers? The result is, generally, that a large number of persons succeed in obtaining free passes, OVER ALL ROADS, without the slightest return, in any way, to the roads which issue them, whilst the unfortunate stockholder, who receives no dividends, is, generally, made to pay for his ticket when traveling on his own road.

Another class of claimants for free passes are the employees and officers of railroad companies. It is common to have a present or former employe of a railroad company travel all over the United States with a circular letter stating his claim to a free pass. Why should the officers and employees of a railroad be entitled to a free pass over any other road, or even over their own road when not traveling on the business of their company, any more than any other person? The fact that they are employed by a railroad company, who generally remunerate them liberally for their services, ought to make them equally liberal towards the railroads, instead of its being a reason to claim a service from them without compensation. What would be thought of a clerk in a merchant's employ, who should claim, besides his salary, the right to take or use the property of his employers and their fellow merchants, without remuneration.

But it is said, by railroad managers, that if free passes are refused to editors, proprietors of hotels, officers and employees of other railroads, merchants clerks, &c., &c., they will exert all their influence to divert the traffic to other lines that will grant them. Would respectable men thus act in opposition to their own actions? Do editors send their papers and insert advertisements without remuneration? Do hotel proprietors allow a large portion of the community to live at their hotels without cost? Do merchants part with the commodities in which they deal, to their friends and acquaintances, without remuneration? Do officers and employees of railroads and merchant's clerks, ever labor without salaries? This opinion of railroad managers is, in fact a vile libel on the respectable members of the above classes; but, were it true, what influence could they exert when the motive for their action would be so apparent.

A reduction in the rates of transportation

of and fares, being always followed by similar reductions on the part of competing lines, results in nothing but loss to all, leaving the business divided precisely as it was previous to the reduction—for the few days' start, which any Company can gain over its competitors, need not be taken into account. The alteration of the classification of freights produce precisely the same results.

The speed at which the express trains are run is a great tax on Railroads. It is the well established opinion of all Engineers and Railroad men, that the wear and tear of a road is in the same proportion as the square of the speed; that is to say, that trains run at twenty miles and trains run at thirty-five miles an hour, affect the wear and tear of the road-bed and machinery as 400 is to 1,225. Can there be any doubt as to what the true interests of the stockholders of all Railroads require, particularly as the public do not ask for the high rates of speed at which trains are run?

On reflection, it must be admitted that the true interests of all parties should lead Railroad managers to compete for all traffic by the promptitude and safety with which their trains are run; by the civility of all their employees towards the traveler; by the cleanliness and comfort of the refreshment saloons where the trains stop, and by the promptness and good order in which the freight is delivered. Attention to all these points would produce a system and an order in the administration of Railroads which would contribute to the interest of the stockholder and shipper, as well as to the comfort of the traveler. Let the time now devoted by the officers of all Companies in making war upon competing lines and in attending to applications for free passes, be devoted to the true interests of the traveler, shipper and stockholder, and they will all be equally benefited, whilst the self-respect of the employees of the Railroads will raise them far above their present position in the community.

Another subject of great importance to the interests of stockholders is that publicity be given at all times and in all cases to everything affecting the interests of a Company. No important action, entailing large outlays of capital, should be taken by its officers until the project in contemplation be publicly known so as to permit it to be criticised by the stockholders. This will in general prevent the errors of judgement of honest officers and the evil intentions of dishonest ones. It will also prevent the sudden loss of credit so frequently the consequence of incurring debts without its object being known by the stockholders and the public.

The stockholders will be greatly benefited by insisting on detailed annual reports of the administration of the affairs and of the position of every company, as the preparing of such reports forces the officers of a company to analyze the results of the working of the road, and often makes them acquainted with important facts or results which might otherwise escape their observation.

I trust that by calling the attention of all railroad managers to these important subjects they will, one and all, heartily co-operate with the New York and Erie Railroad Company in its present efforts to make the reforms so much needed; but should long-established habits and prejudices make them refuse or hesitate to do so, I call on the stockholders of all railroad companies, if they believe these reforms will arrest the present alarming



depreciation of their property, and aid in ultimately re-establishing its value, to place the management of all railroads in the hands of men who will have more regard to the true interests of the stockholders. CHARLES MORAN, President New York and Erie Railroad.

[From the Journal of the Franklin Inst. for July, 1857.]  
DISCUSSION ON JOINTS OF RAILROADS.

The subject of *The Joints of Railway Tracks* coming up in order (at the stated monthly meeting held June 18), pursuant to notice given at the last monthly meeting, the discussion was commenced by Ellwood Morris, C. E., who remarked:

That notwithstanding the vast extension of railways, and the great improvement made in their rolling machinery, but little has been done for the track, and the plan of the "permanent way" (so-called) has remained substantially the same for twenty years or more, though now in the process of modification by many skillful engineers.

A great difficulty has always existed in forming the joints or connections between the independent bars of iron, of which the tracks of railways are composed, and notwithstanding the very numerous plans proposed or tried for joints (several hundreds in number), we may truly say that no single plan of joint has yet commanded the general approbation of railroad men.

The joints of railways still form, perhaps, the most imperfect part of railway superstructure, and the selection of the best practical joint, under all the circumstances—a problem of great importance to railroads—yet remains a desideratum.

To this subject we wish to draw your attention; and, with the view of opening the discussion, *twenty-one* of the leading joints will now be referred to, and in such brief reference many meritorious plans will necessarily be overlooked; but it is to be hoped some of the members present may assist in the explanation, by bringing forward such others as they may think of use.

#### Notices of some of the Principal Joints.

1. Cast Iron Chair, by George Stephenson, C. E. (1829), on stone blocks, rail secured by wrought iron wedge.\*

2. Cast Iron Chair of Robert Stephenson, C. E., on stone blocks and upon wooden cross-ties, rail secured by a pin keyed through the chair.\*

\*English Patents. Woo pon Railroads. Breese's Railway Practice, &c.

3. Cast Iron Chair with wooden key, first used by J. Lock, C. E., on the Grand Junction Railway,\* and very generally adopted since.

4. Norria' Cast Iron Chair (England), cast upon the joints in place by means of a traveling cupola. This form of chair, which seems to negative all idea of expansion and contraction, is said to answer very well in some cases.\*

5. American Wrought Iron Chairs, commonly used in the United States, weighing 7 to 10 lbs. each—being about 7 inches square on base, and  $\frac{1}{2}$  to  $\frac{3}{4}$  inch in thickness—the  $\frac{1}{2}$  inch chair having proved too light. The  $\frac{3}{4}$  inch chairs weigh 7 lbs., and the  $\frac{1}{2}$  inch chairs 10 lbs. each.

6. Davis' Cast Iron Chair, with elastic seat. This is an open-sided chair, with a flat piece of India rubber placed under the joint, and kept in place by a wrought iron plate with the edge turned down. It is in suc-

cessful use on some of the New England railroads, and is said to make a good joint, but certainly a yielding one.

7. Morley's Divided Cast Iron Chair, in two parts, connected by bolts under the rail. This is a recent invention in the right direction.

8. Hewson's Cast Iron Chair (33 $\frac{1}{2}$  lbs. weight), of the kind used for 60 lb. rails upon the Upper Schuylkill Railroads. This is a close chair without keys, made to fit the base of the rail, and is crossed at the center by a parting rod  $\frac{1}{2}$  inch square, against which the rail rests, and which keeps the rails in place longitudinally.

The following communication from Col. Hewson will show the wear of cast iron chairs in use.

TABLE—Showing the number of Cast Iron Chairs renewed on the Reading Railroad from 1849 to 1855 inclusive, compiled from their annual reports:

Year.	Tons of coal freight and passengers.	Tons materials for use of road.	Total tons carried.	No. of chairs renewed
1849.....	1,284,061	145,503	1,429,564	26,537
1850.....	1,586,230	157,450	1,743,680	27,292
1851.....	1,925,401	219,731	2,145,132	26,286
1852.....	1,940,954	181,217	2,122,171	19,742
1853.....	1,902,036	174,161	2,076,197	13,448
1854.....	2,394,972	187,591	2,582,563	13,385
1855.....	2,662,189	247,478	2,909,667	36,544
	13,695,843	1,313,131	15,008,974	103,234

As it is very seldom that chairs are renewed upon the sidings, I have estimated 106,400 upon the main tracks assumed at 200 miles, and 532 chairs to the mile, including branch to Philadelphia and tracks leading to wharves at Richmond, we find the following results:

That in the passage of 13,695,843 tons of 2,000 lbs. upon the main tracks of the P. & R. R., 153 per cent. of the cast iron chairs have been replaced, at the rate of 23 per cent. per annum, and that 8,000,000 of tons have destroyed the entire number of cast iron joint fastenings on their main tracks.

This destruction by tonnage is fully confirmed by the experience of the roads under my charge, the record of which is shown in the following table:

STATEMENT of the number of broken cast iron chairs for 60 lb. rail re-placed on the tracks of the Port Carbon, Mill Creek and Schuylkill Valley Railroads, from January 1st, 1853, to December 31st, 1856:				
Name of Road.	Tons of coal and freight 2240 lbs. to the ton, from 1853 to 1856.	Number of broken chairs on main track.	Per cent. of whole No. of chairs on main track.	Remarks.
Port Carbon R. R. ....	2,506,353	1233	44	
Mill Creek R. R. ....	2,087,287	1188	32	
Schuylkill Valley R. R. ....	1,933,204	5172	30	
			11	
			8	
			7½	
			663 chairs estimated to each mile of main track.	

NOTE.—That the Port Carbon Railroad is the terminus for the entire locomotive force used by the Reading Railroad in the transportation of coal.

The running of which upon their tracks has greatly increased their depreciation.

P. HEWSON, Eng. Mt. C. & Pt. Co.,  
Mill Creek & Schuylkill Val. Railroads.  
POTTSVILLE, June 11, 1857.

The above eight examples, and a host of others which we have not room even to notice, are of the nature of "supported joints," in which the chairs carry the ends of adjacent rails, and are themselves sustained upon a single cross-tie.

The following thirteen kinds of joint fastening are all of the nature of "fished joints," to the use of which, in some form, all modern experience upon railroads most strongly tends.

9. Wrought Iron Splice, or "American Fish Joint," invented in 1843, by Robert H. Barr, of New Castle, Delaware; put in use upon the New Castle & Frenchtown Railroad, and model deposited in the Franklin Institute, Philadelphia, November, 1843. This is the identical "fish joint" re-invented in 1848 by W. B. Adams, used upon the Eastern Counties Railroad, England, in 1849, and forming at the present moment the most approved railroad joint in England, and we may say in Canada.

10. English Fish Plates of W. B. Adams (1848). These are identical with Barr's (1843), except that Adams' fishes are hollow next the rail, do not fit it tightly, and are secured by screw bolts instead of key bolts, which last is no improvement.\*

11. Smith's T Under-splice of T Rail, patented by Charles E. Smith, of Philadelphia, consists of an under-plate with a rib projecting downwards, and embraced by notches in the cross-ties, while secured by rivets to the rails; this splice is also used with the U rail.

12. Smith's T Under-splice of U Rail, used upon the Pennsylvania Railroad, riveted to the base of the rail, and having a rib projecting upwards into the hollow of the U, which completely secures the joint laterally as well as vertically.

13. Under-plate of the Mad River Railroad, Ohio. This is merely a long plate  $\frac{3}{8}$  of an inch thick, with raised edges or lips, between which the rail sets, and the whole being fastened down together to the cross-ties by the ordinary hook-headed spike in notches.

14. Barr's American Fish Joint, as modified and used upon the Pennsylvania Railroad, by Edward Miller, C. E., which has proved an excellent joint. The only difference between it and Barr's is that a small horizontal ledge or shoulder is rolled upon the rails, top and bottom, so as to give a firm seat to the rectangular fish pieces bolted to the sides.

15. Trimble's Wooden Splice. This is applied outside of the rail, fitting its hollow, and extending over three cross-ties, to which it is bolted vertically by long spikes, and secured to the rails horizontally by four screw bolts, while under the joint a piece of iron plate is put. This makes a very good joint, and has received the approbation of some of our best civil engineers. It is sometimes used double.

\*Clark's Railway Machinery, page 285.



16. Spliced Joint, from the office of the Pennsylvania Railroad Company. This consists of a combination of Trimble's splice on one side and Barr's fish plate on the other.

17. *Steele's Combined Joint*, now used extensively upon the Reading Railroad, and forming a very good joint. This consists of Trimble's wooden splice outside, Barr's fish plate inside, and the Mad River under-plate underneath rails, and covering the joint, both under-plate and rails being notched for the spikes.

18. Hewson's Long Wrought Iron Chair. This is an extension of the ordinary American wrought iron chair, so as to carry a joint between two ties; it acts in part as a splice, and has the  $\frac{1}{2}$  inch parting rod in the center, separating the rails, which is a distinguishing feature in Col. Hewson's chairs, and enables the rails to be used just as they come from the rolling mill, without boring or notching. This joint is now under trial upon the Upper Schuylkill railroads. Col. Hewson says:

"The original patterns of the long wrought iron chair were  $\frac{1}{4}$  inch thick, 26 inches in length, and 7 inches sill plate, giving on sills 7 inches broad a space of 12 inches between bearings; 50 of these have been laid down and severely tested, and three have been renewed in ten months.

300 chairs 5-16 inch thick, similar in all other respects to the one described, have been in use for the same period, and also severely tested with no unfavorable results—none removed. The pattern sent to the *Franklin Institute*, 5-16 inch thick, 22 inches long, with 5-inch sill plate, will give a span 8 inches between bearings, which greatly increased their rigidity. 500 of these have been laid—have given no indications whatever of yielding—none removed.

I have no hesitation in saying that a chair  $\frac{3}{8}$  inch thick, after the size and pattern sent to the Institute, will furnish a redundancy of strength. The Reading Railroad wrought iron chair or under-plate is  $\frac{3}{8}$  inch thick, 32 inches in length, which, upon sills of 7 inches, will give a space of 18 inches between bearings.

My chair  $\frac{3}{8}$  inch thick will have but a space of 8 inches. I think it is better to shorten the chair than to increase its thickness and length, as the track is kept up better.

Placing the joint sills a few inches nearer will not increase the number of sills to the bar.

The wrought iron chair sent to the Institute will average 16 2-10 lbs., 5-16 thick. I have paid 5 cents per pound, taking a small quantity; they objected at the mills to furnishing it for less, as they were obliged to alter their rolls.

The cost in unloading, marking off the holes, turning, punching and fuel, stood at 8 cents each.

This will make the cost per chair, 5-16 thick, as follows:

	Cts.
16 2-10 lbs., at 5 cents.....	81
Labor and fuel in turning.....	8
Total.....	89

The short cast iron chair for 60 lbs. rail, weighs 32 $\frac{1}{2}$  lbs., at 2 $\frac{1}{2}$  cents.....

Difference in favor of long wrought iron chair....3

The cost of a  $\frac{3}{8}$  inch chair will then be as follows:

	Cts.
18 $\frac{1}{2}$ lbs. at 4 cents.....	74
Labor and turning, including fuel.....	4
Total.....	78

This is fourteen cents less than the cast iron chair.

NOTE.—That the iron should be cross-piled at the mill, for it will break when bent with the grain. Different qualities of iron will also require different degrees of heat in turning.

For a simple heating oven without a blast I prefer a medium between the red and cold short.

The plates, when punched, are turned at a proper heat by a hand press. The cost for constructing will not exceed one hundred dollars.

I have observed that the end of the rail against the trade receives the hardest usage; thus on the down tracks of our roads, the northern ends of the bars are more battered, while on the up track the southern ends show the same symptoms. In laying track to strengthen the joints upon a continuous bearing chair, I place the broadest sill against the line of trade, or on that side towards which the heaviest traffic moves.

F. HEWSON, Civil Engineer.

POTTSVILLE, June 13, 1857.

19. American Fish Plates modified by Ellwood Morris, C. E. In this joint greater strength is sought to be given to the fish plates by turning them under the base of the rail. The fish plates are to be secured by 4 key bolts, and bedded or let down about  $\frac{1}{4}$  of an inch into the cross-ties, so as to keep them in their proper position even if the bolts fail. The whole to be secured to the cross-ties by the usual hook spikes. This splice is under consideration by a Committee of the Institute, whose report will be made public in due course.\*

20. Compound Rails of all forms act as fish plates, and make excellent joints, and those with a solid head, as used upon the New York Central Railroad, answer a very good purpose in every way.

21. The Ring Joint of the Camden & Amboy Railroad. This singular splice is formed by means of a ring of wrought iron inserted in notches in the ends of two adjacent rails, which are confined in the ring by three wedges, one of wrought iron under the bottom, and two cast iron ones on the sides. As originally modeled, the ring was a complete circle, and the under wedge a block of wood. The joint is suspended by the ring between two cross-ties, and the rails are simply spiked down to the cross-ties in the usual way. This curious but efficient joint contains a minimum quantity of metal, and in practice appears to stand very well with the heavy rail and large business of the C. & A. R. R.

\* A difficulty arises in practice from the original form of the fish joint, in consequence of the fish plates on the sides of the rails, resting both at top and bottom upon inclined planes, which, under the leverage produced by the rolling action of the wheels, become powerful wedges to break or to unhead the bolts. Late information from England (Colburn and Sanborn, May, 1857), describes this difficulty of loosening and breakage of bolts as being so serious as to be likely to cause the entire abandonment of "fish jointing" in its original form; and it has been already proposed (W. B. Adams) to stamp the ends of the rails while hot into square shouldered seats or recesses for the fish plates.

This great practical difficulty is entirely obviated by the square shoulders devised by Edward Miller, C. E., to receive the fishes, or by lapping or turning the fish plates under the base of the rail, and notching them into the cross-ties, as proposed by Ellwood Morris, C. E.

About twenty years ago a large portion of the track of the Camden & Amboy Railroad was laid with a 40 lb. rail, with "link plates" covering the joints on the outside only, as shown in the sketch.

These "link plates" were about 5 inches by 2 $\frac{1}{2}$  by  $\frac{3}{4}$ , secured by two  $\frac{3}{4}$  inch bolts—they formed in no sense what are called "fish plates" (though in a recent discussion in England they have been so called), since they added nothing to the strength of the joints, and were merely employed as "a link" to keep the rails in place lengthwise.

They have not been used in relaying that railroad, but have been supplanted by the "ring joint," and others.

#### GENERAL REMARKS.

We may perhaps generalize, so as to arrange all railroad joints into two classes:

1st. *Supported Joints.*

2d. *Fished Joints.*

The first are usually formed by chairs or plates, and rest upon a single cross-tie, by which they are "supported;" such joints add no strength to the ends of the rails.

The second are now formed either by "fish pieces" or "long chairs," which are all designed not only to give smoothness and firmness to the joints, but to add also to the strength of the rails at their point of severance. In the present state of our information, there is no question that the best railroad joint is a "fished joint," but in what particular manner it should be fished so as to combine in a due degree strength, durability and economy, is yet an open question.

In addition to having a good joint, its relative place in the track is also of importance, and on this point there is much difference amongst engineers.

Some insist that both joints in opposite lines of rails should rest on the same cross-tie, or be "opposite joints," notwithstanding this duplicates the weakness of foundation; while others insist that the joints in all cases should be "broken," or placed opposite the middles of the bars of the other line.

I have no doubt that "breaking joints" forms the proper system—and was once compelled to alter a half mile of track from "opposite joints" to "broken joints," in consequence of the trouble of keeping it in repair while the opposing joints rested upon the same cross-tie, which difficulty vanished as soon as the joints were broken or alternated, so as to bring only one joint on one cross-tie.

"Broken joints" have been and still are very successfully used upon three of our leading railroads—the Baltimore & Ohio, the Pennsylvania, and the Reading—while the Erie R. R., which was originally laid with "opposite joints," is now being gradually changed, much to the advantage of the road, the comfort of the passengers, and the benefit of the rolling stock.

To show the importance of this question of joints, I may state, on the authority of Col. Franklin Hewson, Engineer of the Upper Schuylkill Railroads, that the heavy cast iron chairs used upon the Reading Railroad have all disappeared under eight millions of tons of traffic; while the cast iron chairs of the pattern shown you (weighing 33 $\frac{1}{2}$  lbs. each), indicate that they will be destroyed by the transit of little over six millions of tons of trade upon the Upper Schuylkill Railroads.

In concluding this subject, I must remark that the expansion and contraction, which theoretically amounts to one-fifth of an inch



(in our climate) in a 20 feet bar, seems to have been successfully ignored in practice by Norris' chair, cast upon the joints in place—by Barlow's saddle rail, which is firmly riveted to under-plates at the joints—by Col. Hewson's parting rod—and by all the forms of compound rails.

While we must admit that change of length in wrought iron must always follow change of temperature, we cannot deny that practically it has far less importance than has usually been ascribed to it, and that the refined instructions given upon this point to track-layers, by many engineers, are of very little moment. Some provision must of course be made for change of length by change of temperature; but practice teaches that this provision may be less in extent than has generally been deemed necessary.

Mr. Tens, of Wilmington, Delaware, who is practically engaged in laying down Trimble's Wooden Splice, patented March 10, 1855, described this joint at length, and stated that before offering it to other roads, it had been most effectually tested during six years upon the Philadelphia, Wilmington & Baltimore R. R., and that it was now in successful use upon the Baltimore & Ohio, Northern Central, and other important railroads.

He stated that this splice cost 80 cents per joint, and that the patent fee was \$10 to \$20 per mile. White oak is the timber preferred for the fish piece.

J. Dutton Steele, C. E., described at length the combined joint devised by him, and used at present exclusively upon the Reading Railroad, with very satisfactory results.

He laid much stress upon the importance of suspending the joints *between the cross-ties*, and expressed the belief that the Reading R. R. Co. were the first to adopt this great improvement on a large scale.

He expressed the opinion that while the strain upon the rails from the rolling load was halved by making joints *between ties*, two ties were brought into play as supports instead of one; thus doubling the tie resistance, and making the joint *four times as strong* as if carried in a chair upon a single tie.

He illustrated this at length in some able practical observations upon the manner of producing fractures of rails in work.

He called attention to the simplicity of his combined joint, and the ease with which it could be put together, or removed from the track, piece by piece—a point of great importance in the maintenance of railroads of heavy trade.

He thought that the introduction of wood into the joints was important, as giving elasticity, and that the mode of connecting the three parts was of consequence, since the irregularities of dimension in rails made it indispensable that the fastenings should admit of being drawn up, so as to accommodate irregular dimensions, and at the same time grip the rail with sufficient strength. *This splice costs one dollar per joint.*

He had laid upon the Reading R. R. one mile of track with Trimble's splice and another with Reeves & Co.'s long chairs; and said that in two years' use the rails of the former were decidedly more worn than those of the latter, laid with long chairs and joints *between ties*.

He explained the mechanism of the action of trains on the rails, saying that the rail upon which the train stood or moved was firmly held by its weight, like a fixed beam, while the forward rail towards which it was advancing,

remained loose, and received a violent shock when reached. He had noticed that on double track railroads breakage of rails usually occurred forward of the motion of the train, or up track one way, down track the other, and this breakage was usually a foot or two from the joint.

He stated that it was absolutely necessary to provide for expansion, and that he had been compelled to take up and alter tracks too lightly laid. In one instance the track sprung up vertically *one foot*, and shot out sideways *two feet*.

He never laid any tracks with opposite joints, *two on the same tie*; thinks that plan is vicious, and in fact impracticable, except on straight lines, and that it has few if any advocates at the present day.

He stated that, owing to some change taking place in the state of integration of the iron rails in use, double-headed rails, worn out on top and then turned, lasted but a brief period.

He had also noticed that rails worn in curves, when turned, went to pieces under the traffic with astonishing rapidity, and stated that merely removing and relaying again *the same rails in the same position*, caused them to wear out with much increased rapidity.

He expressed the opinion that an allowance in some form was necessary for expansion of  $\frac{1}{8}$  to  $\frac{3}{8}$  of an inch in rail-bars 24 feet long.

Mr. Steele, drawing from the resources of his great experience, illustrated these and other points relating to railway joints in a very forcible and satisfactory manner.

Frederic Graeff, C. E. (just returned from Europe), was called on by the President, and stated that in England, and upon the continent, the *"fished joint"* was the favorite joint, and Locke's double-headed rail the favorite rail.

That the joints were usually laid upon the same cross-tie, though the newer lines were introducing the alternate system.

The Swiss seem to have paid little regard to the English or continental examples, but both in their roads, and especially in their rolling stock, they have followed the best *American models*.

Solomon W. Roberts, C. E., stated that there was great difficulty in selecting the best from amongst the very numerous plans offered for the joints of railways, and he illustrated this by an anecdote relative to the celebrated engineers, Stephenson and Brunel—the former, the great advocate of *detached bearings*, admitting, as the result of his experience, that in the end *continuous bearings* were the best; while Brunel, after long practice with *them*, had declared in favor of the *detached system*! For his part, he was now using Reeves & Co.'s neatly made wrought iron chairs, and thought them as good as any other joint.

He spoke of the difficulty of securing a fit of iron to iron, and of the disappointment often experienced in results, saying that he had once laid a railroad in apparently the most permanent possible manner, with stone cross-ties upon heavy and well drained ballast, but it did not stand, and he had to resort to wooden cross-ties, really more perishable, but which made a better track than the permanent materials used at first.

He explained the mode of cutting and preparing under his own eye, in Wales, the original rails of the Reading Railroad, which have stood very well, and thought it would be a great improvement to modern rails if equal pains were taken with them.

Mr. Roberts expressed his willingness to learn and adopt well tested contrivances, but he did not seem to attach much importance to any of the modern forms of railway joints.

Prof. F. Rogers, C. E., remarked that although the method of laying the track on the English railroads was familiar to the engineers, it might be interesting to some of the other members to know that on the majority of those roads it differed from the plan adopted in this country.

The rail used is generally double-headed (Locke's rail), and is secured to the cross-ties, not by hook-headed spikes, but by a chair at each tie, the rail being wedged into the chair by iron or wooden wedges.

It is extremely difficult to keep these fastenings tight, so that they require continual attention.

On the older railways, the joint chairs are of the same form as the other chairs, but usually rather heavier.

In the later examples in England, fish plates, applied on both sides of the vertical web of the rail, are frequently used, the joint being placed sometimes *on a tie*, and sometimes *between two*.

He had seen in Germany, in the spring of 1854, a splice made by applying a piece of timber to the outside of the rail, on the same principle as Mr. Trimble's splice, which has been described. The two inventions are believed to be entirely independent of each other.

The superiority of the permanent way of the continental roads over those of our country, and even England, which was undoubted, Prof. R. thought was to be attributed to the great care taken in laying the rails, and to the constant supervision of them, rather than to any peculiar mode of fastening or construction; as with us this part of the construction, which is tedious and disagreeable to the engineer in charge, is often left too much to the mercy of the ordinary workmen.

The smoothness of these roads may be illustrated by the fact that sewing and reading are frequently the amusements of the passengers on the long express routes of Central Europe; and they may either be indulged in without injury to the eye or inconvenience from the motion.

He thought that the unnecessarily large spaces left between the ends of the rails were a fruitful cause of destruction to the rails and fastenings.

He also threw out the important suggestion that it might be found advisable to make the rails absolutely continuous in stretches of a hundred yards, or thereabouts, so as to reduce the number of joints in a single track railway to about 35 per mile; and with this small number of joints he thought we could afford to expend enough upon each to make them compensate effectually for temperature, and also have an adequate strength to carry the wheels smoothly over, and to resist all lateral displacement, so as to make these comparatively few joints *in fact practically perfect*.

W. Parker Foulke, Esq., concluded the debate, by remarking upon the importance of these practical discussions to the public, and thought that in favor of all well tried devices forming parts of railway structures, and intended to promote the public safety and convenience, all the influence of the Institute should be exerted.

On motion of Charles E. Smith, the meeting adjourned for one week, when the discussion of Railway Joints will be resumed.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds.	Name of Company.	Quot of Stock.	L'n of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	173	Al x'ndria, Lon. & Hmp'r	173	173	5,000,000.00				
498,800	7			1862-3	2d "	54.55	Androscog'n & Kennebec	54.55	54.55	1,400,000.00		209,475.46	110,246.98	none.
199,000	6	July & Jan.			Domestic.		Atlanta and LaGrange..	86.5	86.5	1,000,000.00	129,000.00	278,123.74	173,760.74	4 pr. ct. 6m
52,648	6			now	"	12.5	B'ng'r, Old T. & Milford..	12.5	12.5	135,000.00	52,646.26	29,104.40	8,671.61	15,000 in '53
500,000	7		N. Y.	1860	1st mortgage.	44 5-8	Boston & Worcester..	44 5-8	44 5-8	4,500,000.00	500,000.00	1,102,781.90	437,052.03	180,000 4.6m
500,000	7			1866	Income.		Buffalo & State Line..			1,300,000.00				5 pr. ct. 6m.
200,000	7			1857-9-62	Domestic.		" " "							
200,000	7			1864	4th mortgage.	30.	Central Ohio..	30.	30.					
577,187	6			1872	1st mortgage.	43	Champl'n & St. Lawrence	43	43	1,872,800.00	1,001,067.00	168,200.00	77,700.00	10 per ct.
192,200	7			1874	2d "	110	Ch'r'l'te & South Carolina.	110	110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
380,000	7			86 1-7	Domestic.	138	Ch'go, Burl'ng'n & Quincy.	88.	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,440,000	6-7-8		N. Y.	1868-9	1st mortgage.		" " "							
1,300,000	8			1868-76	Convertible.		" " "							
374,000							" " "							
1,300,000					1st mortgage.	5.	Chicago, Fulton & Iowa..	5.	13 1/2	1,761,149.16	2,241,500.00	221,491.96		
532,000					2d "	25.	Cin. Wil'ng'n & Zanesville	25.						
104,000					3d "		" " "							
305,500					Income.		" " "							
540,000	6				Convertible.		Cleveland Col. & Cin.	103 1/2	139	4,741,220		1 3,754	700,204	6 per cent.
43,000	7			1873	1st mortgage.	85	Cleveland & Mahoning..	85	85	1,500,000.00				
400,000	7			1861	2d "		" " "							
000,000	7			1873			Cumberland Valley..		52	1,218,300.00		160,511.66	81,101.56	\$33,250.24
500,000	8			1857-8-9	1st mortgage.	52	Dayton & Cin. short line.	52	52	1,000,000.00	1,000,000.00			
						93 6-10	Eastern Railroad..	93 6-10		3,345,500.00		665,578.79	288,078.84	\$234,133
350,000	7				1st mortgage.	130	East Tcn. & Virginia..	130	130	625,450.00		30,897.30	19,692.30	
740,000	10			1860	2d "	20	Essex Railroad..	20	20	700,000.00				
88,000	7			1861	1st "	109	Evansville & Crawf'd'vie	109	109	2,228,657.00		243,970.42	136,061.90	\$133,281.45
400,000	7			1864	1st mortgage.	109	The Fitchburg (Mass.) R.R.	109	109	3,540,000.00		681,162.52	213,837.81	3 per cent.
200,000	10					23	Fox River Valley..	23	23	800,000.00				
						15	Fair Haven Branch..	15	15	300,000.00		50,381.33	14,822.45	\$166,240.00
100,000	6				1st mortgage.	233	Georgia RR & Banking Co.	233	233	4,156,000.00		1,068,202.54	337,689.42	\$8,662,400.00
100,000	6				1st "	20	G't Falls & Conway R.R.	20	20	27,376.69		14,207.07		
300,000	6 1-9			1858	1st "	281 1/2	G't West'n R.R. of Can..	281 1/2	281 1/2	4,101,550.00		2,068,836.00		8 pr. ct.
4,000,000	7			1869-70	1st "	74	Housatonic Railroad..	74	74	2,000,000.00		339,146.50	178,529.95	
2,000,000	7			1860	2d "	144	Hudson River..	144	144	4,000,000.00		1,924,382.44	718,037.40	
1,812,000	7			1875	3d mortgage.	58	" " "	58	144	4,000,000.00				
12,885,000	7			1876	1st "	99 1/2	Illinois Central R. R..	117 1/2	704	18,453,376.00		1,476,035.27	1031,499.08	7 pr. ct.
4,115,000	7			1876	2d "	64 1/2	" " "	64 1/2	704	3,558,376.00				
3,000,000	7			1860	Freeland.	94	Indiana Central..	48	72 1/2			354,871.00		3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.	80.	Iron R. R..	13	13	123,700.00				
700,000	7	Jan. & July 1		1862	2d "		Kentucky Cen. 2d Div..			719,500.00				
700,000	7				1st mortgage.		Knoxville & Kentucky..							
						32	Laurens (S. C.) R. R..	32	32	166,000.00		23,233.59	14,233.59	
218,000	7				1st "	184	Louisville & Nashville..	184	184	300,000.00		50,234.71	14,149.13	\$8,000
1,000,000	7				2d "	12 35-	Lowell & Lawrence	12 35-	12 35-	2,697,090.00		587,236.57	162,277.50	10 pr. ct.
1,000,000	7			1866	2d "		Mad River & Lake Erie..			2,697,090.00				
2,000,000	6			1875	1st "		" " "			2,697,090.00				
2,500,000	7				1st "	26	Manchester & Lawrence.	26	26	1,000,000.00				\$24,000
2,000,000	7			1868	1st "	50.	Marietta & Cincinnati..	17 1/2	17 1/2					
60,000	7 and 8			1874	2d "		Mexican Gulf R. R..		27					
420,000	8			1867	1st "		Milwaukee & Horicon..		30					
329,000	8				1st mortgage.		Mineral Point R. R..		32					
320,000	8			1881	1st "		" " "		32					
6,000,000	6			1868	2d "		" " "		32					
				1884	1st "		Mobile & Ohio..		497	10,000,000.00		253,498.96	162,802.24	
500,000	7			1869	1st mortgage.	15	Nashua & Lowell R. R..	15	15	600,000.00		193,752.42	55,501.74	7 pr. ct.
2,356,000	7	May & Nov.	N. York			55	New Haven & Northm'tn	55	55	922,500.00				2 pr. ct. 6m
8,892,600	6	June & Dec.	N. York			83.	New York Central..	83.	555	23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
3,000,000	7			1864	Con. till 1859.	84 1/2	" " "							
936,000	7			1873	1st mortgage.	79	N. Y. & Harlem R. R..	10 1/2	123	5,717,100.00		1,040,293.26	324,291.57	
411,700	6			1864	2d "	25	" " " Pref.	25	25					
500,000	7			1863	1st "		N. Y., Prov. & Boston..		50	1,58,000.00		245,713.00	51,544.40	
300,000	6				1st "		N. Lon., Willim'tu & Pal.		66	1,700,000.00		120,571.50		\$25,000
					2d "		" " "							
						5	Pontchartrain R. R..	5	5	500,000.00				
1,500,000	6			1873	1st mortgage.		N. O., Opel'o's & Gr L West.			6,00,000.00		116,795.00	366,118.80	7 pr. ct.
1,000,000	6			1873	2d "	62 1/2	N. Y. & New Haven..	62 1/2	103 1/2	3,000,000.00		1,007,666.48		
2,000,000	6			1885	3d "		North Western Va. R. R.							
1,500,000	7			1859	1st mortgage.		" " "							
3,000,000	7					118	Northern (N. Y.) R. R..	118	19 1/2	2,000,000.00		600,000.00		7 pr. ct.
419,300	5					60	North Missouri R. R..	60	60			25,176.74	88,458.56	2 1/2 pr. ct.
221,800	6			1877	"		Norwich & Worcester RR			2,111,500.00		304,236.33		
				1860			" " "							
							Ogd'sb'z, Clay't'n & Rome		94			289,690.10	137,875.93	5 pr. ct.
400,000	6			1866	1st mortgage.	88 3-	Ontario, Simcoe & Huron	88 3-	88 3-	2,957,500.00		276,539.02		
1,200,000	6			1875	2d mortgage.		Orange & Alexandria R.R.							
300,000	7			1868	1st mortgage.	47	" " "	47	47	1,500,000.00				
300,000	8			1873	1st "		Peoria & Bureau Val. R. R.							6 pr. ct.
						28 1-5	Philadelphia & Trenton..	28 1-5	47	1,000,000.00				
350,000	6			1861	1st mortgage.	76	Portsmouth & Concord..	76	76	2,000,000.00				
800,000	7			1864 to 1874	1st "	62 1/2	Potsdam & Watertown..	62 1/2	86	950,000.00		68,525.42		
1,260,000	6			20 years.	1st mortgage.	86	Rutland & Washington..	86	168 1/2	6,000,000.00				
						116	St. Louis & Iron Moun. R.R.	116	26	400,000.00				
500,000	6				1st mortgage.	26	Salem & St. Louis R. R..	26	26					
250,000	6				1st "		Snd'sky, Mansf'd & New-k			500,000.00		75,246.06	19,050.64	
					2d "		Sullivan Railroad..							
						145	Tennessee & Alabama..	145	73			39,586.44	17,378.08	11m. 15 pr. ct.
317,000					1st mortgage.	242	Terre Haute & Richmond	242	242	1,294,450.00				
300,000				1861	1st mortgage.		Toledo, Wauash & Western							
198,000				1840	2d "		Troy & Boston..			1,000,000.00				
262,500				1875	3d "		" " "							
						46	Vicksburg & Jackson..	46	215	3,000,000.00		322,048.60	165,076.04	2 pr. ct.
2,500,000					1st, 2d, 3d "	31	Virginia & Tennessee..	31	31	165,000.00				
						171	Westchester (Pa.) R. R..	171	171					
596,000	7				1st mortgage.		Wilmington & Manchester							
200,000	7				2d "	32	" " "	32	32					
						45 69.	Winchester & Potomac..	45 69.	45 69.					
							Worcester & Nashua..							



## LONDON QUOTATIONS

AMERICAN STOCKS AND BONDS.

July 17th, 1857.			
Belvidere, Del., guar. 1st mort., conv. ....	—	@	88
Chicago & Rock Island, Mort, conv. v. 1855, ..	—	"	—
Cin. Ham & Dayton, 2d mort., .....	—	"	80
Detroit & Milwaukee, 1st mort., conv. till			
1865, .....	62	"	64
Erie, 3d Mortgage, 1883, .....	75	"	78
" Sinking Fund, .....	72	"	75
" conv. 1862 .....	62	"	67
Grand Trunk (Canada) Debenture, .....	87	"	82
Great Western " conv., .....	109	"	113
" " non-conv., .....	109	"	113
Illinois Central, 1st Mort., 7's, .....	87	"	88
" " with option 70 per cent. ....			
shares till Jan. 1858, .....	101	"	103
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill.			
Cent., .....	82	"	84
Little Miami 1st Mort. not conv. 6's, .....	—	"	—
Marietta and Cincinnati, 1st Mort., .....	—	"	—
Michigan Central, conv., 8's, 1860, .....	90	"	91
do do do 1869, .....	90	"	91
N.York Central. No Mort. Not conv., 6's 7'	77	"	89
" conv., 7's, .....	88	"	90
Ohio and Mississippi, 1st Mort., .....	—	"	—
Ohio and Pennsylvania, Income 1872, .....	65	"	68
Panama. No mort. conv. 1866, .....	—	"	—
Pennsylvania, 1st Mort., conv., .....	84	"	86
" Sterling, 2d Mort., .....	90	"	95
Steuheenville and Ind. 2d Mort., .....	—	"	—

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent.

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE.

AND AT PRIVATE SALE.

BY HEWSON & HOLMES.

For the week ending August 12, 1857.

BONDS.	
Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, with interest.....	80
Cincinnati, Hamilton & Dayton R. R. Co. 7 per cent. 1st Mortgage Bonds.....	90
Do, 2d do do .....	82½
Covington & Lexington R. R. Co. 6 per cent. 1st Mortgage Bonds with interest.....	68
Do, do, 7 per cent. 2d Mortgage with interest.....	67
Indian polis & Cincinnati R. R. Co. 7 per cent. 2d Mortgage Bonds.....	80
Ohio & Mississippi R. R. Co. 7 per cent. 2d Mortgage Bonds.....	55
Hillsborough & Cincinnati R. R. Co. 7 per cent. 1st Mortgage Bonds.....	50
Covington & Lexington R. R. Co. 10 per cent. Income Bonds.....	65
Indiana Central R. R. Co. 10 per cent. Income Bonds.....	90
Marietta & Cincinnati R. R. Co. 7 per cent. Domestic Bonds.....	37½
Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds, due 1866.....	85
Little Miami R. R. Co. Dividend Scrip.....	80
Cin., Ham. & Dayton do do inc. int.....	120
Indianapolis & Cin. do do do .....	70
Cincinnati 6s of 1884.....	80
Central Ohio R. R. Co. 4th Mortgage Bonds.....	25
Cincinnati & Chicago R. R. Co. Real Estate Bonds various.....	15 to 25
State of Ohio Township Bonds, various.....	40 to 60
do do County do do .....	80 to 90

## STOCKS.

Little Miami R. R. Co.	90
Columbus & Xenia	88½
Cin., Hamilton & Dayton	67½ to 68
Indianapolis & Cin.	62½
Indiana Central	48
Covington & Lexington	18
Marietta & Cincinnati	17½
Hillsborough & Cincinnati	17½
Mad River & Lake Erie	15
Ohio & Miss.	11½ to 12
Eaton & Hamilton	18
Junction (Ind.)	7½ to 8
Cincinnati & Chicago	9½
Farmers' Bank of Ky., ex-dividend	117½
Ohio Life 1 s. & Trust Co. Bank	102

MONETARY AND COMMERCIAL.

Since our last we have no change to notice in the condition of the markets for money. The demand is small, and good paper is taken at regular rates by the discount houses. Anything but strictly good paper is very closely scrutinized. The harvest has now progressed so far as to render it evident that the crops will be abundant, and the panic—predicated upon the failure of the cereals, like the expected Comet, will not come this year.

Our market for Stocks has been dull. This is owing to the absence of operators, and the general dullness of all

kinds of business, and not to any distrust or disinclination to engage in speculation.

We notice in the Eastern Journals rumors of an over issue of Stock in one of the leading Railroad Companies,—the Miebigan Southern. The charge is denied, and the matter will receive investigation. It is very much to be regretted, that, as yet, our state authorities have not seen proper to establish some such commission for the protection of stockholders in Railroads, that many of them have established for the preservation of the integrity of the Banking system. Where Companies, liable to the scrutiny and examination of honest and capable men, in their capacity of railroad commissioners, and compelled to make a fair and full exhibit of the actual state of their affairs, instances of dishonest management would be more rare. The possession of the power, and its actual exercise in cases where it was needed, would keep many a man honest, who now falls imperceptibly and unconsciously from good to bad, and bad to worse, till he finally treads every maze of crime.

In New York we notice an easy market. The week opens dull, as is usual at the present season. Stock fluctuations were rather governed by incidental circumstances than by any large operations which were commenced.

We subjoin our usual quotations from Hewson & Holmes' Circular.

Dullness has been the predominant feature in the Stock Market during the past week. We are now in the midst of the heated term, and all operators who are not absolutely fire-proof are out of town seeking a cooler climate. Prices of all investment securities are unchanged; an occasional sale on a small scale serves to indicate a steady market; for prices, we refer to the annexed table of sales. In speculative securities there has been a dead calm, we have no sale of moment to report.

The earnings of the Ohio & Mississippi, the Marietta, as also the Covington & Lexington Roads are increasing finely, and will show for this month large receipts, fully up to the expectations of their respective friends. We annex the earnings for the month of July of the Little Miami and Columbus & Xenia, the Mad River & Lake Erie and the Hamilton and Dayton Rail Roads, all of which show a falling off as compared with the earnings of corresponding month last year. This is no more than was expected, and is attributable to general causes heretofore alluded to and generally well understood. The business of all these roads, open well for the present month, and indicate a more encouraging and satisfactory future. As we close we are favored with the report of the Covington and Lexington road, which shows a very slight increase over July, 1856. This road, we understand, has now as large a freight business as its rolling stock will accommodate. The grain crops from the South are generally first in market. The arrivals of wheat from Kentucky over this road are now very heavy, and under the increased tariff which has been adopted, its earnings will be largely increased.

Money can be had on first class paper on easy terms, but other paper is worked off with great difficulty. Exchange on New York is in less demand, and rates are rather easier. Bankers checks, however, cannot be had less than  $\frac{3}{4}$  prem. This rate, in view of the large amount of funds that will come from the East for investment in wheat and flour, cannot long be maintained. A general movement of the wheat crop, which is just commencing, will draw heavily on the east for funds, and turn the current of exchange more in our favor.

Earnings Little Miami, and Columbus and Xenia Railroads, July 1856,.....	\$93,352.28
Earnings Little Miami, and Columbus and Xenia Railroads, July, 1857,.....	\$81,661.63
Decrease,	\$11,699.65
Earnings Cin. Ham. & Day'tn R. R. July '56,	\$40,250.45
" " " " " " '57	36,317.88
Decrease,	\$3,932.57
Earnings Mad Riv. & L. Erie R. R. July 1856	52,081.38
" " " " " " 1857	51,006.67
Decrease,	\$1,074.71
Earnings Cov. & Lex. R. R. July '57	31,499.30
" " " " " " 1856	31,499.00
Increase,	\$490.30

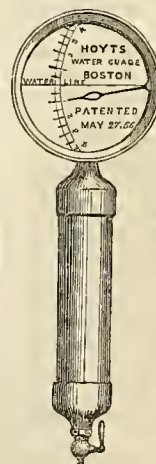
SALES AT THE NEW YORK STOCK BOARD—Aug. 10.

\$2,000	Virginia 6's.....	91
5,000	Missouri State 6's.....	70½
2,000	Tenn. State 6's, '90....	85
5,000	Illinois Central R. R. Bonds.....	99½
8	Illinois Central Ref. Rights.....	124
8	Illinois Central July Rights.....	124
20	shares New York Central.....	83
100	" Cleveland & Toledo.....	55½
100	" Eric.....	32½
60	" Galena & Chicago.....	91½
26	" C., B. & Quincy.....	88
25	" Harlem R. R. stock.....	10½
200	" Reading.....	71
100	" Mich. Cent.....	84
550	" Mich. S. & N. Ind.....	50
75	" do do do pref.....	75
50	" Cleveland & Pittsburg.....	40½
5	" Chicago & Rock Island.....	94½
50	" LaCrosse & Milwaukee.....	35

FOR SALE.

**E**IGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices,  
and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

ALLEN & NOYES'

## METALLIC PACKING.

To Whom it May Concern.

**NOTICE** is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jy23-1m

## RAILROAD IRON.

**1500** TONS best quality Welsh Rails, "Erie" pattern, 5<sup>1</sup>/<sub>2</sub> to 59 lbs. per lineal yard, now at New Orleans, for sale by

feb19-1m

SE. LIVINGSTON & CO.,  
9 South William street, N. Y



## IRON AND STEEL.

BY CHRISTOPHER BINKS.

CONCLUDED.

## VI.—Some Synthetical Evidences.

When malleable iron is placed in a crucible along with some of this azotised carbon, the intractability as to fusion of the metal is soon overcome, and it melts at a white heat, and cast steel is the product.

When there is prepared a mixed precipitate of oxide of iron and of oxide of manganese, and this is reduced to the metallic state by passing over it, at a high temperature, hydrogen gas—that is, in the usual manner, made into spongy iron, plus manganese; this, placed in a covered crucible, readily melts and gives an exceedingly hard alloy, but one that does not possess all the properties of real steel.

But when with spongy iron itself there is mixed some ferrocyanide of manganese, and then it is exposed to a full heat in a covered crucible, the button that is produced has all the properties of steel.

The same follows on substituting ferrocyanide of iron, or any of the anhydrous alkaline ferrocyanides.

The addition in the hot and closed crucible of bitartrate of potash to the pure iron does not give steel; but the addition of the double salt of tartrate of potash and ammonia (which is a kind of improvised mode of making cyanogen) gives a button of steel.

Another series of instructive facts, in proof and in illustration of these reactions, is obtained by the use of the voltaic battery to heat the iron while it is exposed to the action of an atmosphere of gaseous or volatile matters:

Let the malleable iron, upon which to operate for conversion, or proof of non-conversion, be drawn into rods of about  $\frac{1}{4}$  of an inch in diameter at each end, but drawn out between these—that is, in the middle—into a thin wire, tapering gradually towards the thin ends. Fix such a rod in the center of a glass tube or globe, so shaped and contrived that gaseous matters can be passed into and through it; connect the obtruding thick ends of the rod with the opposite poles of a voltaic battery, powerful enough in its action to raise the thinner portion of the rod to a red or white heat *ad libitum*, whilst the thicker ends never become so hot as to interfere with the means used to keep them in their position. Fill the tube successively with the following gases and watch the results:

Gaseous cyanogen, after a few hours, gives rise to the formation of steel in those portions of the rod that have been fully heated, and this is accompanied by a deposition of carbon upon the face of the metal.

Gaseous ammonia *per se* does not give steel, but produces a curious disintegration of the face of the hottest portion of the rod.

Olefiant gas *per se* does not give steel, but gives a deposition of carbon on the hotter portions of the wire. Olefiant gas mixed with ammonia, or with nitrogen, does give steel, and so on.

But, without further multiplying examples (and this mode of experimenting admits of a great variety), and without attempting at this time to inquire into some of the complicated phenomena they present, one fact is ever apparent, namely, the invariable co-operation of both nitrogen and carbon wherever the result is the production of steel.

## VII.—Deductive Inferences and Theories.

In thus briefly, because of the necessary

limitation of time, gathering together these facts and evidences, and in submitting them to the consideration of this audience, I am perfectly aware, on the one hand, of the many imperfections of my own work, and, on the other, of the great skill as analysts, experimenters, and theoretical reasoners, of very many now present, and of many others under whose scrutiny this paper will afterwards fall. But my object is to submit, not to decide; and, whilst giving my own views and deductions, to inquire of these better judges what would be their interpretation. Should such interpretation be altogether different from the writer's, he will rejoice to dismiss his own, provided only that this other be the true one. But, as to this simple question of the nitrogen element, how much yet remains to be done! Out of the multiplicity of reactions, and the line of experimenting here indicated, how wide a field is there yet to be traversed by the experimentalist; and how much is it to be regretted that those magnates, the iron and steel masters of this country, do not resolve themselves into a species of scientific congress, and, casting aside for a while their trade jealousies, organize some mode of settling all these vexed but most important questions.

The conclusions that to the writer appear to be warranted by the previous evidences are:

That the substances whose application to pure iron convert it into steel all contain nitrogen and carbon, or nitrogen has access to the iron during the operation.

That carbon alone added or applied to pure iron does not convert it into steel.

That nitrogen alone so added or applied does not produce steel; but that

It is essential that both nitrogen and carbon should be present, and that no case can be adduced of conversion in which both these elements are not present and in contact with the iron.

That nitrogen as well as carbon exists substantially in steel after its conversion; and such presence is the real cause of the distinctive physical properties of steel and of iron, in which latter these elements do not exist.

That, presumptively, but not demonstratively, the form of combination is not that of cyanogen (though that compound plays so important a part in conversion), but is that of a triple alloy of iron, carbon and nitrogen.

That experimental research is yet required to determine the relative proportions of the elements when their union gives pure steel.

What in the chemical history of nitrogen is there that is incompatible with its substantial existence in steel, in some form analogous to other combinations we know it to assume under similar conditions with other metals? It is under a temperature as high as that needed to melt steel that it combines with carbon to form cyanogen, and then with potassium to form cyanide of potassium, and under this combination it is permanent, so long as it is kept out of contact with decomposing agents, as oxygen and the elements of water, &c.

In the presence of our atmosphere, with its affluence in nitrogen, why should we ever ascribe to that element some merely negative attributes, or properties serving only to control or modify the more vivid action of some other element? Why dwell on its azotic action, or on its assumed mere modifying action among the phenomena of animal

or vegetable life? An element existing everywhere, touching everything, penetrating, permeating, and by diffusion intermingling itself with every gaseous body it comes in contact with, might be supposed *a priori* to exercise other functions (and many) besides the merely negative ones usually assigned to it. And among other speculations that naturally arise out of these questions, is it quite impossible that the play of colors peculiar to heated steel, the assumption for example of the pure blue, and the purple, may not in reality be due to some phase of development of some of the forms of ferrocyanide of iron?

We possess other evidence of the use of nitrogen from another and unexpected quarter: it is on record as a practice of the Indian "Wootz" steel-maker that, along with his iron or imperfect steel in his melting crucible, he places, as his carbon-giving material, the wood of the *Cassia auriculata*, and covers the whole with the leaves of the *Convolvulus laurifolia*, both vegetable productions rich in azotised matters. These placed in his closed crucible will give an azotised carbon in contact with the metal. And what may have been the origin of this far-back practice of the East—this, to us, apparently empirical handicraft of some Indian artificer? Has it originally been the result of some mere accident or of some induction or deduction, or is it a relic of some state of civilization and of science superior to those of the West? The Sheffield artisan seeks, even up to the present day, that which the Indian artificer had found out ages ago.

## VIII.—Manufacturing Appliances and Progress.

But, howsoever all this may be, whether the nitrogen exist as an essential constituent in steel, or its office is one of agency only, the practical applications for manufacturing purposes that flow out of the above collection of facts are in no way affected by the tenability or the contrary of any theory of combination. The fact of the important part in the conversion of iron into steel that is played by nitrogen and carbon conjoined, and particularly when in the form of cyanogen compounds, is incontestible, howsoever may be explained their mode of action. A movement in this direction, for manufacturing steel, has recently sprung up in several quarters, but principally among continental and American inventors, who, in various ways, apply ferrocyanide of potassium, and mixtures of that with other matters, for manufacturing steel; showing that the effects and the value of these reactions are beginning to be recognized, though their precise mode of action is, in every instance, given differently from that here advanced. It is still the carbon only of these compounds that they seek for, and through whose combination alone they expect the conversion to be effected. The application for forming steel superficially, of prussiate of potash, is, of course, very old; and it was in 1845 that the writer first applied gaseous cyanogen and volatile compounds of cyanogen, or matter containing their elements, in order to convert iron into steel, a method which in the year 1846 appeared publicly.

It is the experience of the writer, in his examinations of iron that is deficient in malleability, that this deficiency is due as well, and even more frequently, to the presence in such iron of unreduced oxide disseminated throughout the mass, as to the presence and action of sulphur, phosphorus, and other matters to which this deficiency is most gener-



ally attributed. This fact seems also to have attracted the attention of Mr. Bessemer, who alludes to it in one of his recent specifications. Now, the carbon-reducing power in metallurgical operations of alkaline cyanogen compounds is well known, and hence is suggested the possibility of employing them as well to remove from impure iron the sulphur, phosphorus and silicium, so as to effect the complete reduction to the metallic state of any oxide of iron disseminated through the ores. But these alkaline cyanogen compounds, ferrocyanide of potassium for example, when added to molten impure iron, whilst exercising extraordinary purifying effects, leave the metal finally in the condition of steel. Here, then, is another problem, how to take advantage of these peculiar reactions, in order to produce, *ad libitum*, either steel or malleable iron—in other words, best, after steel is produced, to effect its reconversion into iron.

It is impossible, within the limits of this paper, fully to discuss these reactions, or even such, for example, as those between that admirable converting agent, the ferrocyanide of manganese and iron, or those with iron containing a large quantity of carbon, when such iron is converted into steel, on the application to it of muriate of ammonia.

It will be distinctly understood that the facts and reactions given by the writer have not yet been extended in manufacturing operations, but they are more than merely experimental.

The value of combinations of carbon and nitrogen in steel-making being acknowledged, then, of all such combinations or of elements containing these, it is undoubtedly to the use of the cyanogen compounds that we should resort for all manufacturing purposes; and the time seems not very far distant when these compounds will become some of the most readily obtained and cheapest of chemically-manufactured products. It is some years ago now that Mr. Lewis Thompson pointed out how these could be had through the nitrogen of the atmosphere, and thus gave the germ of a branch of manufacture that will grow into vast importance; and for the promulgation of which the world is indebted to this Society.

The operations of the blast furnace suggest methods for the production of those compounds that are of the highest practical value. There are at play here all the elements for the production of cyanogen, of certain cyanides, and thence of other compounds, and the requisite conditions can be superadded for securing these for commercial purposes. That cyanogen was formed in certain zones of the furnace was proved by Bunsen and Playfair. Dr. Clark, of Aberdeen, many years ago, examined a saline product that was found to ouze out of tuyere holes of a blast furnace in Scotland, and discovered it to be cyanide of potassium. In several places on the continent, as at Mariazoll, in Styria, for example, we are told by Gmelin that this product is so abundant as to be sold commercially for galvanic gilding purposes. It is, of course, the product of cyanogen, when combined with the accumulated proportion of potash contained in the fluxing limestone. But why not specially add the alkaline element, and combine in the furnace simultaneously the peculiar reducing and converting actions of these compounds with their special manufacture for other and equally valuable industrial applications of them that are springing up? And this is undoubtedly one of the most important of the directions that the iron manufacture of this country will in future be found to take.

The writer has not the honor of a personal acquaintance with Mr. Bessemer, but he cannot close this paper without, on his own account, expressing his sense of the deep obligations he considers the iron world owe to that gentleman, were it merely for the practical development of that beautiful fact, the vivid reaction between atmospheric air and molten iron of which so much use can and should be made. This obligation is a great one, to say nothing of that singular impulse, in all directions, in this manufacture, that his discovery has given rise to. With that species of hypercriticism which would seek to underrate this discovery, because a stream of air impinging upon strongly-heated iron had always been known to give a vivid combustion of the metal, the writer has no sympathy. Such after-thinkers will be invariably found never to have done anything themselves—never to have given to the world one single new fact, or to have thrown a spark of light on the meaning of any collection of facts; otherwise they would have some sympathy for the pains-taking and the ill-required labor that, too frequently, are the only concomitants of such achievements.

For all and every one of the busy workers now, in the many directions, devoting their efforts for the improvement of steel and iron manufactures, there is ample room and occupation. The work is indeed but scarce begun; its progress slow, but the beneficial issues inevitable. England above all has a mighty stake in these developments, and in their co-operation we can well afford to welcome the arrival of other laborers in the common field, whether they come from France, from Belgium, from Prussia, or from Austria, or they may be some of our ambitious and stalwart rivals from across the Atlantic.

#### RAILWAY FIRE INSURANCE.

The opening of the "New England Railroad Mutual Fire Insurance Company" presents a new, and we think important feature in the American Railway system. It is not that the destruction of railway property by fire is of itself so serious a matter. There is great mistake and prejudice on this point. Ordinary people, and especially ordinary underwriters, think that anything where a steam engine is concerned must be an extra hazardous risk. But a culinary fire is really more dangerous. Railway property exposed to fire is for the most part as safe as any that is the subject of insurance. But a slight loss by fire often subjects a company to an immense loss of business, and is a serious public inconvenience. A system of mutual fire insurance, which, while it reduces the premium to about the actual cost of insurance, will also cause the general adoption of those precautionary measures which are peculiar to the property, and thus secure that prevention which to railway corporations is infinitely better than cure, must be of immense value. The "New England Railroad Mutual" is based on these two ideas. It designs to furnish insurance at cost, and to look after its risks so that the cost shall be a *minimum*. It will apply, with a vigilant supervision, to all its risks the measures of safety which have been found most effectual on the best managed roads.

The Company was chartered by the Massachusetts Legislature of 1856, for the exclusive purpose of insuring Railway Station & Freight Houses, and other property in which Railway corporations have an insurable interest, against loss or damage by fire. It was authorized to insure such property in all the New England States, New York, New Jersey, and Pennsylvania. By an additional act of the present Legis-

lature, its field was extended to embrace the whole of the United States and the British N. American Provinces. By the charter the Company is brought under the General Laws that relate to fire insurance, both as to its rights and duties, and by a self-imposed restraint, it did not allow itself to take risks till the proposals for insurance amounted to \$1,000,000. This condition was fulfilled by the following first subscriptions for insurance:

Railway Companies.	Amount to be insured.
Eastern Railroad.....	\$100,000
Boston and Maine.....	100,000
Portland, Saco and Portsmouth.....	30,000
Boston and Worcester.....	100,000
Worcester and Nashua.....	20,000
Norwich and Worcester.....	75,000
Western.....	100,000
Connecticut River.....	10,000
Hartford and Providence.....	50,000
Danbury and Norwalk.....	20,000
Taunton Branch.....	10,000
Fitchburg.....	100,000
Cheshire.....	25,000
Boston and Lowell.....	50,000
Nashua and Lowell.....	10,000
Concord.....	50,000
Northern (N. H.).....	50,000
Passumpsic.....	15,000
Philadelphia, Wilmington and Baltimore.....	50,000
Michigan Central.....	50,000
Total.....	\$1,015,000

On this basis the Company began to issue policies on the 1st of July, 1857. The rates charged are those of the substantial Stock Companies of New England, and a note is given to three times the amount of the premium. That there will be a large returnable surplus, we have no doubt from the experience of the manufacturing corporations that have adopted a similar system. By returns from twenty New England railways, it has been found that in an average term of 6 1-5 years, they have paid in premiums \$136,000, and received back for losses \$38,800. Thus they paid the Insurance Companies \$97,200 more than the cost of Insurance, or in other words, the profit of the Insurance Companies was 71-6 per cent. of the whole premium. For corporations in general well able to insure themselves, this is too much to pay. The "Manufacturers' Mutual," of Providence, a company exposed to larger masses of loss, and to risks of at least equal hazard, during twenty-one years of its existence, has charged an average premium of 1 per cent. per annum, and has returned 6-10 of 1 per cent. yearly, leaving the actual cost of insurance no more than 4-10 of 1 per cent. The Rhode Island Mutual, which has been in existence eight years, charging the same rate of premium, has returned 71-100 of 1 per cent., making the rate of insurance but 29-100 of 1 per cent. The secret of this cheap insurance is doubtless the care to reject bad risks and to impress precautionary measures upon the establishments insured. The Boston Manufacturers' Mutual has been in operation six or seven years, and till the last year the average cost of insurance to its members has been 35-100 of 1 per cent. During the last year, while its vigilant manager has been prostrated by illness and prevented from taking his accustomed supervision of the risks, the cost has been about equal to the premium, 1 per cent. The Aetna Insurance Company, of Hartford, has recently stated that its losses from Manufacturing risks during the last ten years have exceeded the premiums—which are at the rate of 2 per cent. per annum. If this be true, it proves still more strongly the value of selection and supervision.

The New England roads alone, it has been ascertained by inquiry, at present insure to the amount of \$6,000,000, and their insurable property amounts probably to not less than \$11,000,000. The difference between 2 per cent. and one-third of one per cent. on this amount, is \$183,334, an item to be considered. But we see no reason why an efficient management on the proposed plan may not only save the \$183,334, but the probably greater loss consequent on in-



terruptions of business. The Company has the advantage of the greater distribution of railway property, making it almost impossible that any company's loss should approach the amount it has insured, and the certainty that a company will not create a loss by fraud. Should Railway Companies in the United States generally embrace this plan, the best precautions will be more generally applied, and the basis being broader, the cost will be reduced more nearly to a minimum and the protection will be well nigh perfect.—*American Railway Times*.

#### MILWAUKEE & SUPERIOR R. R.

We have already several times alluded at some length to the condition and progress of this important enterprise, which promises so much to our city. Mr. ALTON, the President, has recently published in New York a brief statement which contains some facts interesting to our readers. He says:

"The distance from Milwaukee to Green Bay is one hundred and twenty miles.

The portion now under construction, and which is designed to complete this season, lies, between the city of Milwaukee and the village of Cedarburg, a distance of 18 miles.

There has already been subscribed to the Capital Stock of the Company over \$340,000. In addition the City of Milwaukee has issued in aid of the construction of this road its corporate bonds to the amount \$100,000. And there has been expended in grading and in the purchase of materials and equipments over \$100,000.

Nearly or quite three-fourths of the grading is completed; ties, chairs and spike are all furnished; ten platform cars have already been delivered, forty more cars are in process of construction, to be delivered as the wants of the road may require. The first Engine is on its way to Milwaukee, and arrangements made for furnishing others as rapidly as needed. All the iron required for the track has been shipped from New York rendering it certain that this section will be completed and opened for business by the first of October next. As soon as this portion of the road is opened, the construction towards Port Washington and Sheboygan will be continued as rapidly as means can be realized without embarrassing the finances of the Company.

This Company offer for sale a limited amount of Farm Mortgage Bonds; these mortgages are taken on unincumbered, improved farms located upon the line of the road, and mature on the 1st day of July, 1855, with interest at the rate of 8 per cent. payable semi-annually in the city of New York. In addition to the security given by the Mortgages, the Company guarantee the prompt payment both of principle and interest.

Great care is exercised on the part of the agents of the Company in perfecting these securities, in order to make them a desirable and safe investment.

The circular is published for the purpose of calling the attention of capitalists to the *farm mortgages* of the Company, as a desirable means for investment, and letters are published from Hon. GEO. BLISS, of Springfield, Massachusetts, S. S. WARD, of Hartford, Connecticut, Dr. GROSVENOR, of Providence, and Messrs. JESSUP and MARIE, of New York, speaking in high terms, but no higher than they deserve, of these mortgages. We copy the letter of Mr. BLISS, who has made a personal examination of the subject.

C. R. ALTON, Esq., *President of Milwaukee and Superior Railroad Company*:

At the request of yourself and others interested I have during the last month visited, and spent several days in Milwaukee and passed down the shore of Lake Michigan upon and near the line of your road to Manitowoc, about 90 miles.

On this tour I visited the principle cities and settlements upon and near the Lake, examined many of the farms upon which your Company hold mortgages; and made extensive enquiries both on the line and in Milwaukee in reference to the stability and prospects of your enterprise. On returning to Milwaukee I passed through the interior to Fond du Lac, and thence by Lake Winnebago and the Fox River Improvements to Green Bay.

As the result of all my enquiries and information, I am happy to say that it is in the opinion of all intelligent men with whom I have conversed—and in that opinion I concur, that the affairs of the Milwaukee and Superior Railroad Company are in the care and management of highly respectable, intelligent and responsible parties; and that the prospects of the success of the Company are flattering; that the road passes through a country much of which is settled and under cultivation, and which is fast filling up with the best class of immigrants;—those able to pay for, clear and cultivate their farms; and that the cities upon the Lake through which the road is to pass are thriving, with an active business population rapidly increasing.

I find that the Road has been commenced with a reasonable certainty of being opened for about twenty miles the present season, and I am assured and believe it will be extended as fast as available means are furnished for its construction.

The Milwaukee and Fond du Lac Air Line Road, as it is called, is an independent interest, and has a separate organization, though controlled and managed by many of the parties managing the Milwaukee and Superior Road. It passes from the latter road directly through the interior to Fond du Lac; and I am assured by persons conversant with the country, that it traverses one of the most densely settled interior districts of Wisconsin. At Fond du Lac it connects with the Chicago & Fond du Lac Railroad, and the land grant extension of that line west of Lake Winnebago to the city of Oshkosh, and thence to Lake Superior; and at the same point the Air Line connects with the Navigable waters of Lake Winnebago, the Fox River improvements, and through these channels with the city of Green Bay. And seems clear to me that if this Air Line road is completed to Fond du Lac, it cannot fail to draw through it to Milwaukee, a large share of the business of the whole northern district. The cities of Fond du Lac, Oshkosh, Appleton and Green Bay are prosperous, and means of communication already provided, promise a large accession to their population and business.

Milwaukee is one of the most thriving cities of the West; and in its public spirit and a wise forecast for its future extension and increase, it exceeds by far any city of the whole north western country which I have seen. It cannot fail to furnish a very large business to a railroad extending northwardly and north-westerly.

In reference to the securities offered by your Company I made a very particular examination. The Company has ample powers by charter, has been legally organized and is

in good repute.—The laws of the State of Wisconsin, give very full authority, not only for the issue of railroad securities, but for their enforcement and collection.

As to the *Farm Mortgage Bonds* taken and offered for sale by the Company, I took occasion to examine many of the farms so mortgaged; and I have no doubt that the security for them is ample. Upon particular enquiry I learned that the appraisals of the farms were by fair and disinterested men; and that the certificates of title and of freedom from incumbrances given by the recording officers were entirely reliable.

So far as I examined or could learn, the notes and mortgages were taken in a form strictly legal. In case of default in payment of interest or principle, process of foreclosure may be instituted, and in ordinary cases, the money may be made by sale of mortgaged premises, under order of Court, in three months after the commencement of process.

On the whole I consider the Farm Mortgage Bonds offered by this Company, strictly legal, and amply secured, and among the best securities which the market affords.

Very respectfully, GEO. BLISS.  
SPRINGFIELD, Mass., July 8, 1857

## SILVER, GOLD, LEAD,

And Other Minerals,

ON THE PROPERTY OF THE

## Sonora Exploring and Mining Co.,

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country, and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O.



## Most Direct Route to the East.



## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fares as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FRIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES, Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mu., Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK, Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

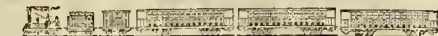
They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

1856.

## LITTLE MIAMI

AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	25 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	30 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Luverden, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus: One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE

## IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 9:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BARCOCK,

Ag't Cin. and St. Louis Omnibus L

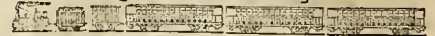
Office No. 2 Burnet House.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:20, 4 and 6:20 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities. Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M. INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M. MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburgh, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. Train, FAST EXPRESS, via. Clyde through to Cleveland at 9 P. M., making close connection with

## LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 12 hours shorter than by any other route.

The 2:20 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:20 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8 A. M., and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:45, 6:15 and 10:25 P. M.

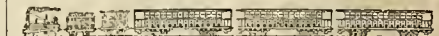
For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash, and Toledo; also Logansport and Lafayette.

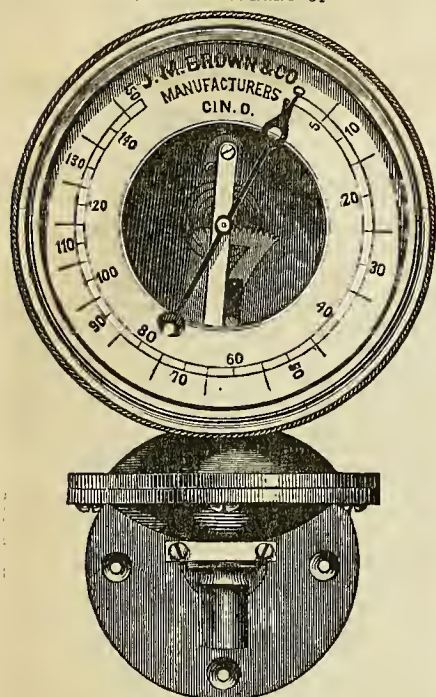
Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Frtght. Ag't.  
Indianapolis, Sept. 16, 1856. [mh29-1y.]



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmith's Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

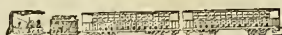


N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,  
Manufacturers of

LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, S5 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feh. 7. '66-2m.] A. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush-

Printed and Tinted do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width.

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation  
sepl8 DOREMUS & NIXON

## W. G. ATKINSON,

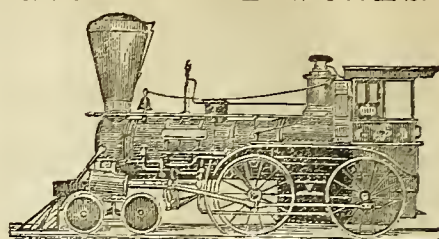
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, holts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS,

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows, Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trimmings  
for windows and Seats. Varnish, Coach Japan  
and Gine; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Cond-  
uctors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
1006.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, &c. terms. Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

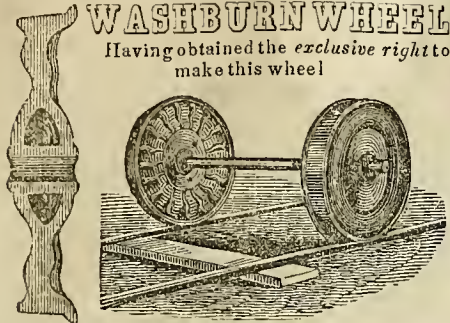
Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.  
Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded to these pumps at Steam Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855 1



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

**LOCOMOTIVE HEAD-LIGHT,**  
Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS.

Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

**Steam and Water Gauges,**  
Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks.

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Cheeks, Freight Trucks,  
**CAR FINDINGS,**

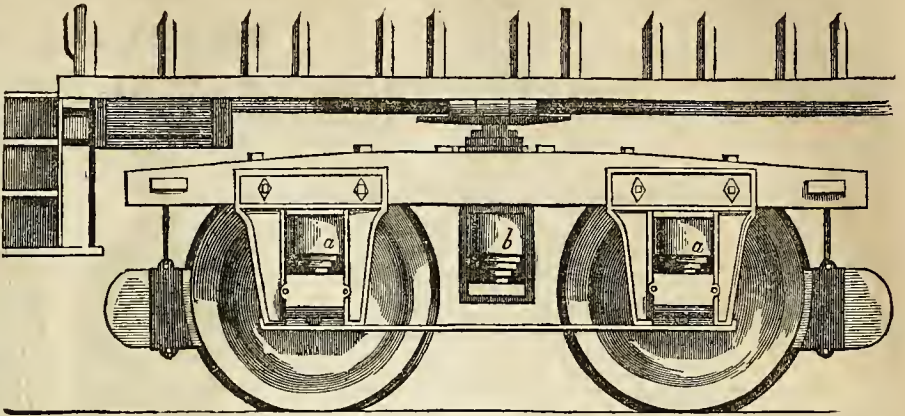
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED.

oc23-1y

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT... M. D. WELLMAN... C. M. RUS

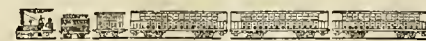
## DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 167\* JOSEPH DAVENPORT.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,

Muskingum Works, Zanesville, O.

jan 1.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1 n21 NEWARK, N J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Zanesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Supl.  
Racine, May 15, 1857. ny21

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cin- cinnati Railroad.

VIA LAWRENCEBURG,

In connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.

Cincinnati, Jan. 31, 1855. [jan 1-1y] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of road bed of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied in Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBUE,  
Consulting Engineer,  
118 Park St., Baltimore.

J. 4

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN &amp; CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply a selection of articles used in the construction and operation of railways.

**Bank of Commerce Building, N. Y.**

Refer to J. H. A. Stevens, Esq. President Bank of Commerce, J. H. A. Stevens, Esq. and J. H. A. Stevens, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Dunbar, Sherman & Co., Messrs. Stillman, Allen & Co.

Feb 5-ly

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
Feb 5-ly 10 Wall st., near Broadway, New York.

**SAFETY & ECONOMY.****JAMES HARRISON JR.'S****Automatic Steam Whistle,****FOR LOCOMOTIVES.****PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec 11 Second avenue, corner of 2d street, N. Y.

**T. F. RANDOLPH & BRO.****Mathematical Instrument Makers,****N. W. Cor. 5th & Walnut sts.,****CINCINNATI, O.****Patent Self-Adjusting Lantern!**

THE MOST APPROVED LANTERN FOR

**RAILROADS, STEAMBOATS,**  
**AND FOR GENERAL PURPOSES.**

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGWAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

**WOOD ENGRAVING.**

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan 8 17 119 Walnut st., Odd Fellows' Building,

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**

Ledgers &amp; Records only. For Books, Letters, &amp;c. For Letter Press only.

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you tell us for trial.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

ANDERSON, GATES & WRIGHT,  
**STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,**  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst),  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 25 H Street, Washington, D. C. apr 12

**Thorough Bred Steers  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,****"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....AUG. 20, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
BY WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.  
Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 26.

#### EDITORIAL.

Why are not Railroads Profitable Investments.....	413
The Polytechnic College of the State of Pennsylvania.....	413
Artificial Marble.....	414
One of the Leaks of Railroad Management.....	414
Railroad Chairs.....	414
Locomotive Engineers.....	414
Hoyt's Water Gauge.....	415
Brevities.....	415

#### RAILROADS.

Lexington & Frankfort R. R.....	415
Annual Report of the Atlantic & St. Lawrence R. R. Co.....	417
Grand Trunk Railway.....	418
Baltimore & Ohio R. R.....	423

#### MISCELLANEOUS.

Trade and Revenue of the Canals.....	415
Important Railroad Suit.....	418
The Future of California Trade and Travel.....	419
Discussion on the Joins of Railroads.....	422
Railroads and Empire in India.....	423

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	420
London Quotations.....	421
Monetary and Commercial.....	421
Sales at the New York Stock Board.....	421
Cincinnati Stock Sales.....	421

THE POLYTECHNIC COLLEGE OF THE STATE OF PENNSYLVANIA.—The Polytechnic College incorporated by the Legislature, 1853, and organized and opened the same year, on the plan of the Industrial Colleges of Paris, and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

Lectures followed by examinations are given in all the Departments, and the Professors call to their aid a well furnished Analytical Laboratory, extensive apparatus, models, cabinets of art and minerals, diagrams, and other means of illustration.

Our readers will find the advertisement of this institution in another column.

VOL. 5.—No. 26.

### WHY ARE NOT RAILROADS PROFITABLE INVESTMENTS?

This is a question often asked, and as often answered in every variety of way. Every one has a theory of his own, and nearly every one condemns railroad investment as a thing like hydrophobia or small pox, dangerous in itself—in its very nature injurious and destructive. Now the simple fact of the case is that railroads actually are paying investments, and the poorest of them earn a reasonable percentage on the cash capital, actually invested in them; but it is a notorious fact that many of the leading lines do *not* pay their stockholders any dividends. The reasons of this are: 1st. They have to pay interest and dividends on too great an investment. 2d. It costs too much to earn what they get. And 3d. They do not earn enough.

1st. They have to pay interest and dividends on too great an investment. The average cost of the railroads of the United States may be set down in round numbers at \$30,000 per mile. Many of them should have been built for \$20,000, and *some have been* built for much less. The causes for the high figures representing the cost of some of our lines we do not propose here to review. We are dealing with the simple fact of cost and expenditure in construction, and propose here to go no further. Now the lines mentioned above, and which have proved thus far unprofitable to their stockholders, are mainly those which have cost from \$40,000 to \$60,000 per mile—say an average of \$45,000.

Now this amount, in general terms, may be stated thus:

$\frac{1}{2}$ Stock, say.....	\$15,000
$\frac{1}{2}$ Bonds, at high rates of interest.....	30,000
	\$45,000

It is clear that in this case the road *must* pay without fail the interest on its bonds, which amount to as much as its competing roads cost in stock and bonds both. These bonds were probably sold originally at a heavy sacrifice, and thus the road was saddled with an incubus of debt which may for an indefinite time prevent it from paying a dividend on its stock. Thus, it is clear that the construction account represents too great an investment.

Again, we stated that the average cost of our roads has been \$30,000 per mile. The average business of the roads will, therefore, be based on charges which will enable the whole railroad interest to pay remunerative profits on that investment. At these rates the roads which have cost less than the average will pay largely to their stockholders; while in those which have cost more than that sum the stockholders must waive their claim to remuneration in favor of the bondholders, whose claims *must* be satisfied.

2d. It costs too much to our railroads to earn what they get. It costs our railroads too much to earn their income; or, in other

words, they do not conduct their business with sufficient economy. The salaries paid their officers are too high. Happily this error, like that of construction, is not universal, nor even general. It will, however, be generally found to follow in the train of the preceding one, and is as dangerous as it is unwise. We need but instance the recent case of the Erie R. R. Its new President is to receive a salary of \$25,000 per annum; and that from a road which is hardly able to pay the interest on its bonds. The excuse for the commission of this error is that in the present condition of the road it is a matter of the highest importance to secure for it the best talent that the country can afford, cost what that talent may. Now if it always followed that the highest salary commanded the highest talent, there might be an appearance of plausibility at least in the argument; but it is a notorious fact that the best talent is not always to be enticed by high salaries and precarious positions. A sensible man knows too well that in an unprofitable concern the chief manager must be the scapegoat, and that the higher salary, the more frequently will aspirants endeavor, and successfully too, to overthrow the best of management, loading it with abuse and misrepresentation. Hence, so far from wishing a position rendered enviable by its enormous pay, a sensible and competent man—and there are many such to be found—would prefer a position in which, from the labors attending it, and its moderate reward, he could reasonably expect a permanency of position. To fill the place of President of the Erie R. R., many a man could have been found now getting a salary of from \$2,000 to \$3,000, who, from practical experience, habits of labor, and economical notions, would have been far better fitted than the present incumbent. Such men know by experience exactly what it costs to perform every operation that is done on railroads; and such men, with moderate notions of their own worth, in our opinion, are the men who should be in charge of railroads.

But it is not alone by paying high salaries that the operation of railroads costs too much. There is another worm which is eating the vitals of the railroad system. We mean the worm of commissions—not commissions paid to merchants who profess to live by them, but commissions paid by merchants and manufacturers to employees on railroads, as bribes for the patronage they may be able to extend. The locomotive manufacturer pays the master machinist to recommend *his* engines; the oil vender pays to get his oil used; the car maker his cars. In short, on some roads, there is not an article used, from a spike to a locomotive, on which the road has not paid a tax to some of its employees for the exalted privilege of buying it for cash from its manufacturer or vender. The whole system is



wrong and rotten, and is generally linked to the evils we have already mentioned.

The evils of salaries and commissions, that do so much to damage the railroad interests, are errors of the heart. They are intentional wrongs committed in full knowledge of the evils they entail. But there are errors of judgment in operating, which, although less culpable, are not less injurious. For example: a road doing a small business, which runs as many trains as one doing a large business, commits an error of judgment, and one which has not a little to do with the smallness of its dividends and the unprofitableness of its management.

3d. The roads do not earn enough for the work they do. To make \$30,000 per mile a 7 per cent. investment, the roads should net \$2,100 per mile; and allowing 50 per cent. of the gross earnings to be sufficient for working expenses, we see that they should earn an average of \$4,200 per mile per annum. Now it is quite probable that the roads of the country average a larger sum than the above; but the average per centage of expenses is greater than 50 per cent. Take for example the passenger business. On many roads passengers pay an average charge of *two cents* per mile, while the average cost to the roads is one and a half cents per mile. This gives a per centage of 75 per cent. of gross earnings for operating expenses. Hence we say the roads do not earn enough for the work they do.

It is undoubtedly true that much of the passenger business of railroads could be done at two cents per mile on slow trains; but when high speeds are used higher rates of fare should be obtained. And the whole schedule of charges should be regulated in proportion to the cost of performing the labor.

In these hasty remarks we have pointed out a few of the errors of our railroad system; and in so doing we do not wish to be understood as conceding the point that railroads are unsafe or unprofitable. On the contrary, we believe, and unhesitatingly assert our conviction, that railroads, economically built and managed, are among the safest and most profitable investments offered to the public; but to keep them so, like merchandizing or real estate, they need the personal attention and care of those who should be most interested in them—their owners, the stockholders.

**ARTIFICIAL MARBLE.**—A process has been patented by the Marquis of Campana for producing an artificial marble of great beauty and durability from alabaster, gypsum and other earths, in themselves too friable for building purposes. The material is exposed to a heat equal to about 212° Fahrenheit, and is afterwards plunged several times into water of the temperature of the atmosphere, and then exposed to the air for a period varying from

five to thirty days; after which it is in fit condition to be polished, and resembles marble.

#### ONE OF THE LEAKS IN RAILROAD MANAGEMENT.

The controversy which has for some time been raging between Ross Winans and A. & W. Denmead & Son for the patronage of the Baltimore & Ohio Railroad in building locomotives, has brought to light the following letter, which sufficiently explains itself:

August 29, 1856.

MR. J. C. DAVIS, M. M. N. C. R. R.:

Dear Sir:—We have called several times to advise you we have about finished a superior freight engine, 18 inch cylinder, 20 inch stroke, which we think, if your road wants power, would suit you. It is built in the best manner.

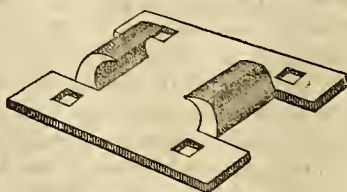
To any of our friends who put upon their road or sell to other roads our engines, we allow, as a commission, \$100 for each engine. Hoping, if you should hereafter need engines, you will not forget us, we are yours, respectfully, A. & W. DENMEAD & SON.

This is one of the most open pieces of bribery we have ever witnessed, and would indicate a degree of demoralization to which we had hoped that our railroad system would never be reduced. If master mechanics, superintendents, and others charged with the purchase of supplies for railroad companies are thus to be tampered with—if their judgment is to be bribed by offers of commissions for putting articles on their own or other roads at fixed prices, and companies will still extend their patronage to firms who thus bribe and demoralize their employees, there is no means of estimating the amount of taxation to which innocent stockholders may be subjected by designing men.

Whether the evil has extended little or much, it is one which calls for prompt and efficient measures to be taken for its suppression; and we trust our railroad companies will at once adopt such measures as will put an end to what honest men can only regard as speculation.

#### RAILROAD CHAIRS.

We visited a day or two ago the Railroad Chair and Spike Works of Messrs. J. B. Green & Bro., Congress street in this city. Messrs. Green & Bro. have been engaged since 1852 in the business of manufacturing wrought iron chairs, and consequently have some pretensions to experience in this species of manufacture. They have just put up a new patented machine, capable of turning out 3½ tons of chairs per hour, with the labor of three men and a boy. The accompanying cut represents the chair made by this machine.



The iron for the chair is first prepared in the rolling mill, in strips of the exact width that the chair is designed to be. It is then clipped in the factory to the length of the

chair. These little pieces of iron of the extreme dimensions of the chair are then heated to redness in the furnace, and when red hot are placed one at a time in the machine. They are there held in a die, of the shape of the body of the chair, with a section in the centre of the shape of the rail for which the chair is intended. The lips are then cut by revolving shears and turned to their places on the rail by a punch on each side. The advantages claimed for the chairs manufactured by this machine are, that they furnish a perfectly level bearing for the rail and the cross ties. Each chair is a counterpart of the preceding one, and being made in a die which is perfectly true, must of itself be true and straight. The lips are sheared by the machine close up to the point at which they are turned up and in turning them, they are thickened at the bend. The advantage of this is that the fibre of the iron is not torn and broken. It is claimed for these chairs that they are one-third stronger than the old style of chair. Messrs. Green & Bro. also manufacture spikes and boiler rivets and are putting up a patented machine for making hot pressed metallic nuts and washers. The latter, we believe has never been attempted before in Cincinnati.

#### LOCOMOTIVE ENGINEERS.

The following is a copy of a memorial prepared for presentation to the General Assembly of the State of Maryland at its next session:

*To the Honorable the General Assembly of Maryland:*

The memorial of the undersigned, locomotive engineers and others, citizens of the State of Maryland, respectfully sheweth that there are frequent occurrences upon the several railroads within their State, as well as throughout the United States, connected with the running of locomotive engines, which involve the loss of life and limb, and also the destruction of valuable property; and your memorialists believe that the rapid increase of railroads throughout the Union having caused a corresponding demand for locomotive engineers, that demand has been (in the absence of any law of restriction or supervision, such as they have in view) supplied, to a partial extent, by persons either wholly unqualified, or of doubtful fitness for that responsible position; and your memorialists, further believing that the sad occurrences before recited are material y attributable to the unskillfulness or inexperience of many persons now acting as locomotive engineers, would pray that your honorable body will prohibit by law the employment of persons to perform the duties of that office until they shall have been declared properly qualified therefor; and further, that you will institute in this connection an Act specifying the standard of qualifications desirable to be obtained, and establish a commission to sit as a Board of Examiners, with authority to grant licenses to all whom they may find possessing the requisites called for by the law. Finally,

Your memorialists, fully believing that the enactment by your honorable body of a bill embracing the foregoing provisions will, as far as the State of Maryland is concerned, to a large degree, correct the evils set forth, trust that your honorable body may grant their prayer, and, as in duty bound, they will ever pray, &c.

We like to see the disposition here manifested by railroad employees to prevent the employment of any but competent persons in the responsible situation of railroad engineers; and we would suggest, in furtherance of the great object of the improvement of their profession, the establishment of scientific and mechanical societies at one or two principal points on all the great lines. Each society to have its library of well selected books; its lecture hall, and its debating room, where



various points connected with their business could be fully discussed by the practical workers of the roads. Such a movement would soon have a visible effect on the management of railroads. It would develop the intelligence and talents of the large class of employees on whose labors the safe and efficient operation of the motive power depends, and in its result would be one of the most important measures of reform ever adopted in railroading. In view of the great advantages that might reasonably be expected from the cultivation of the intellect and experience of this class of employees, our roads would be justified in making appropriations from their funds to establish the libraries; and they may be well assured that a few hundred dollars expended in this way would soon be repaid in the increased economy and efficiency in the operating department.

**HOYT'S WATER GAUGE.**—Our readers will find in its proper column an advertisement for the above water gauge. It is a simple mechanical invention for telling, at all times, the position of the water in steam boilers. Its advantages over others now in use are in its durability, simplicity, and its constant and accurate indication of the solid water within the boiler, the foam not being dense enough to move or affect the float, which, being filled with compressed air, is in no danger of loading or collapsing by the pressure upon its surface. The float is also directly connected with the indicating hand by means of a lever and shaft working in a steam-tight case elevated above the water, so that no sediment can collect about the shaft, to prevent its always working with perfect ease and accuracy. No packing is needed, as the shaft, in passing through the case to connect with the indicator, forms of itself a perfectly steam-tight joint—not creating friction enough to prevent its working perfectly free at all times. It is easily applied to all kinds of steam boilers, locomotives, stationary and steamboat.

#### BREVITIES.

##### —DAVENPORT & CEDAR VALLEY R. R.—

At an adjourned meeting of the citizens of Davenport, held July 9, a committee of five were appointed to draw up Articles of Incorporation, and take all necessary measures to incorporate the above railroad. The committee were:

**On Incorporation**—Ebenezer Cook, H. B. Hoffman, L. C. Dessaint, Geo. L. Davenport, John L. Davis.

The road is to commence at some point on the Mississippi & Missouri R. R., between Davenport and Durant, and to run northwesterly to Cedar Rapids.

**—RE-ROLLING RAILROAD IRON.**—An extensive works is erecting at Chicago for the purpose of re-rolling worn rails.

**—PENSACOLA & GEORGIA R. R.**—The Florida *Sentinel* states that the work on this road is progressing satisfactorily.

**—MOBILE & OHIO R. R.**—The Mobile *News* states that two vessels arrived at that port on the 31st inst., each with a large quantity of iron for the Mobile & Ohio Railroad. One of the vessels brought 2,087 bars of iron, and the other has 1,502 bars, and 4,102 fishers. The work of track-laying, which has been for a long time suspended for the want of the material, will now probably be resumed and continued with energy, and without interruption, until the final completion of the road to its terminus on the father of waters.

**—VICTORIA BRIDGE, MONTREAL.**—A portion of the iron work of the superstructure of this enormous bridge has been received, and is to be put immediately in its place.

#### TRADE AND REVENUE OF THE CANALS.

The receipts of produce at tide water by the Canals was as follows:

The quantity of flour, wheat, corn, and barley, left at tide water during the fourth week in July, in the years 1856 and 1857, is as follows:

	Flour, bbl.	Wheat, bu.	Corn, bu.	Barley, bu.
1856.....	57,404	331,789	503,713	100
1857.....	27,500	108,214	319,023	—

Dec. 30, 1856	299,575	Dec. 184,690	100
---------------	---------	--------------	-----

The aggregate quantity of the same articles left at tide water from the commencement of navigation to the 31st of July inclusive, during the years 1856 and 1857, is as follows:

	Flour, bbl.	Wheat, bu.	Corn, bu.	Barley, bu.
1856.....	416,266	2,379,604	2,687,178	149,159
1857.....	215,231	1,484,352	1,635,325	124,030
Dec. 201,035	1,795,249	1,031,853	14,529	—

By reducing the wheat to flour, the quantity of the latter left at tide water this year, compared with the corresponding period of last year, shows a deficiency so far this season of 560,985 barrels flour.

The following table shows the quantity of some of the principal articles of produce left at tide water, from the commencement of navigation to the 31st July inclusive during the years 1855, 1856 and 1857:

	1855.	1856.	1857.
Canal open.....	May 1.	May 4.	May 6.
Flour, bbls.....	423,660	416,266	215,231
Wheat, bush.....	840,431	3,279,601	1,484,353
Corn.....	3,988,312	2,687,178	1,635,325
Barley.....	53,843	149,159	124,030
Ty.....	—	—	84,927
Oats.....	1,546,077	2,378,004	1,344,677
Beef, bbls.....	9,682	32,329	2,854
Pork.....	63,346	66,439	9,927
Butter, lbs.....	238,700	304,100	107,947
Lard.....	8,403,100	5,411,900	370,801
Cheese.....	102,000	150,200	138,600
Wool.....	1,669,600	722,600	473,582
Bacon.....	7,867,300	5,307,700	2,003,846

	The revenue is:	Per week.	Season.
1847.....	\$130,969	\$130,969	\$1,654,451
1848.....	81,290	81,290	1,233,221
1849.....	77,509	77,509	1,232,635
1850.....	75,718	75,718	1,131,129
1851.....	104,874	104,874	1,390,840
1852.....	102,536	102,536	1,272,159
1853.....	182,084	182,084	1,272,159
1854.....	86,330	86,330	1,166,945
1855.....	78,887	78,887	1,006,507
1856.....	87,536	87,536	876,426
1857.....	77,048	77,048	830,262

Showing a falling off this year, thus far, in comparison with the receipts of last year, for the same period, of \$146,164; and in comparison with the tolls of 1847, amounting to \$824,189.—*Albany Evening Journal*.

**NORTH PENNSYLVANIA RAILROAD.**—Earnings of the North Pennsylvania Railroad for

July, 1857.....	\$25,928 00
August, 1856.....	8,404 53
Increase.....	\$17,523 53

## Railroads.

### LOUISVILLE & FRANKFORT R. R.

We are in receipt of the Annual Report of this company for its fiscal year ending June 30, 1857, and give it to our readers almost entire. The President says:

"In compliance with the provisions of your charter, we submit the following as our report for the fiscal year ending June 30th, 1857:

We are gratified at being able to report that the business of the road has realized our expectations; and that, notwithstanding the unusually short crops throughout the whole country the last season, its receipts exceed those of the preceding year, whilst its expenses have been materially diminished.

The gross receipts for the year ending with June 30th, 1857, are.....\$243,035 33  
The gross expenses for the same time being.. 132,595 00

Leaving a net profit for the year.....\$110,440 33

Which exceeds that of the last year by \$18,428 13, and is 14.93 per cent. on the whole capital stock of the company, or 7.14 per cent. on the entire cost of the road—out of which have been paid the interest on the debt of the company, the bonds maturing 1st July, 1857, and other amounts.

The following statement will enable you to understand more clearly your financial condition:

#### INDEBTEDNESS.

	5 Bonds due 1st July, 1858, for \$1,000 each, is,	\$ 5,000
10 " " " 1859, " " "	" " "	10,000
226 " " " 1860, " " "	" " "	226,000
34 " " " 1863, " " "	" " "	34,000
12 new issue " 1865, " " "	" " "	12,000
25 " " " 1867, " " "	" " "	25,000
3 " " " 1870, " " "	" " "	3,000

315 Total Bonds, bearing interest of 6 per cent., payable half yearly.....\$315,000

Bonds of the city of Louisville, assumed by Louisville & Frankfort Railroad Company, upon purchase of said city's stock in said Railroad (being 6,000 shares which have been retired), viz:

	25 Bonds due 1st Jan., 1858, for \$1,000 each, is,	\$25,000
25 " " " 1859, " " "	" " "	25,000
25 " " " 1860, " " "	" " "	25,000
25 " " " 1861, " " "	" " "	25,000
25 " " " 1862, " " "	" " "	25,000
100 " " " 1881, " " "	" " "	100,000
225 City Bonds, bearing 6 per cent. interest, payable half yearly.....		\$225,000 00
Amount due State of Kentucky for right of way, &c., on perpetual credit, at 6 per cent. interest.....		74,519 50
Amount of note to James Rudd, for purchase of depot ground in Louisville, payable 1st January, 1858, bearing 6 per cent. interest.		28,096 87

Total debt.....\$642,616 37  
The amount of capital stock issued and to be issued to 1st July, 1857..... 739,919 40

Total amount of stock and debts.....\$1,382,535 77

So large a number of your bonds fall due on and before July, 1860, that we have determined to postpone the payment of a portion of them, by substituting for them new bonds of the company (as authorized by a law passed by the Legislature during its last session), and we have, up to this date, disposed of forty bonds of the new issue, as shown in the foregoing statement, receiving for them thirty-six bonds of our original issue, all except one of them falling due in



1859 and 1860—receiving the difference in the exchange in cash.

These new bonds have been disposed of at such rates that the interest they bear and the discount from their amount will equal to the purchasers eight per cent. per annum on the sum paid for them. In exchanging these bonds for our old bonds, we receive the latter at the same rate of discount for the time they have to run as we allow on our new bonds.

We have also taken in, during the year, for cash, eight of our bonds due in 1860.

We have made no effort until recently to dispose of our new bonds in this way; but, from the established punctuality of your company, and the success we have already met with, we are confident that we shall be able to take up as many of these bonds as will enable us to meet our payments up to July, 1860, without the least difficulty.

When this is effected the company will be in a condition at once to make cash dividends of at least 6 per cent. per annum on its stock out of its net receipts, after providing for the payment of the interest on its debt, and providing a sinking fund sufficient to meet its bonds as they become due.

If the condition of the monetary affairs of the country was such as to enable us to dispose of a greater amount of new bonds than will be required to prepare us to meet those maturing in July, 1860, we could, by funding more of your present debt, make cash dividends at an earlier period than 1860. And we are inclined to the opinion that cash dividends should be paid at as early a day as possible, provided it is not done at too great a discount on your new bonds, or before you are in a condition to continue them. But this is a question which our successors must determine.

The entire cost of your road is \$1,545,791 25, and your capital stock only amounts to \$739,919 40. We do not at present deem it advisable to declare a stock dividend, as we can see no advantage it would be to the stockholders; we are, nevertheless, of the opinion that as fast as the debt of the company is paid off additional stock should be issued to the stockholders, from time to time, so that when the whole debt is paid the stock account will balance the construction account.

The arrangement for the joint running of your road with that of the Lexington & Frankfort Railroad Company, under the plan submitted to and approved by you, at a special called meeting, on the 17th day of November last, has been in operation for six months, and it has realized our best hopes, and promises so to continue.

The contract authorized by your vote, at the special called meeting, had on the 22d day of January last, to subscribe in behalf of your road \$100,000 in the capital stock of the Lexington & Big Sandy Railroad, has been

entered into, in strict accordance with the terms then submitted to you. As then suggested, we deem the construction of this road (connected with and of the same gauge of yours, as stipulated for in said contract) very important to your road, from the increased travel and traffic it would bring to it. The work on this road is, we believe, progressing, but not so rapidly as we had hoped it would.

Since your last regular meeting, the bridge across the Kentucky river at Frankfort (contracted for by our predecessors) has been completed, and we find it in all respects equal to our expectations, and is a work which does great credit to its builder. During the past year the bridges along your road, over Benson creek and its tributaries, have been also renewed or repaired. (For more minute description of bridges see Superintendent's Report.) The turnpike intersecting your road at Bagdad, and extending to the Frankfort & Shelbyville Turnpike, at a point near Clay village, to which (as named in last year's report) your company had subscribed \$2,000, as also the turnpike connecting Eminence and Shelbyville, to which we, during the present year, subscribed \$3,000 (in lieu of \$10,000 conditionally subscribed several years since by your company, are both in rapid course of construction, and will, doubtless, be completed in a few months, and when done must bring much additional travel and business to your road. For these subscriptions you will receive stock in said turnpikes.

In conclusion, we deem it a cause for congratulation that the business of the road has been done during the whole year with remarkable regularity and freedom from accidents of all kinds, which is the best evidence of the continued faithfulness and efficiency of the Superintendent of your road.

It is due to the officers, and the employees of the road generally, to say that we believe they have been faithful in the discharge of their respective duties."

The Superintendent says:

"I beg leave to submit the following annual report for the year terminating June 30, 1857: The earnings have been derived from the following sources:

From passengers.....	\$130,297 90
From freights.....	106,955 92
From mails, &c.....	5,751 51

Amounting to.....	\$243,035 33
Exceeding the earnings for the previous twelve months	\$5,987 52.

This increase, though small, affords gratifying evidence of the gradual and permanent growth of the business of your road. Whilst the present prosperous condition of the country continues, I think you may confidently rely upon earnings fully equal to if not greater than those of the last year. Your business, being almost entirely of a local nature, cannot but be affected favorably by the construction of new roads.

The expenses for the year have been \$132,-

595 10, leaving as net earnings \$110,440 33, a handsome increase over those of the year ending July, 1856. These expenditures are about \$5,000 less than those actually incurred for the year, in consequence of the stocks of materials in car and machine shops being increased by items which were not included in former inventories which would properly have increased to that extent the earnings of previous years.

#### REPAIRS OF ROAD.

This account is charged with \$31,448 30, which is a small reduction as compared with last year. It covers all expenses for raising, aligning and surfacing the track, opening ditches, culverts, etc. The old sub sill upon which the ties were laid, is nearly entirely decayed, and its place is being gradually supplied with broken stone as ballast, which will involve constant annual expenditures until the whole road is ballasted.

#### IRON.

No new iron has been purchased this year, nor has any been, as yet, re-rolled. There will be required, during the ensuing year, from one hundred to one hundred and fifty tons of rails. I have ordered seventy-five tons of new rails from the works of E. W. Stevens, at Covington, Kentucky, and will supply the balance required by repairing and re-rolled rails, a contract having been made for re-rolling at a cost, delivered here, of about \$34 per ton, whilst the new rails will cost about \$74 delivered. The cross-ties, which are of locust, are beginning to require renewal, an expense hereafter to be incurred annually. I have found it difficult to procure a supply of locust ties, except at prices that would render them far less economical than good white oak ties.

#### REPAIRS OF BRIDGES.

Two wooden bridges upon Benson, and two of short spans, one over the streets in Frankfort, and the other over the approach to the Kentucky river bridge, have been renewed at a cost of \$7,514 66. The Frankfort wire suspension bridge has been removed, and the wooden truss bridge commenced last year has been erected in its place. This bridge is composed of three spans, one of 120 feet and two of 162 feet each. Two piers of substantial masonry, one in the river in 20 feet water, and the other on land, were erected in order to reduce the spans to such an extent as to render a wooden structure safe and economical. The cost of the masonry was nearly one-half the whole expenditure, so that future renewals can be made, even of iron, at about one-half the present outlay. The difficulty of putting in secure foundations, and other causes, have increased somewhat the cost of the bridge over the estimates. I propose to cover the timbers with some preservative material, which will add about \$600 to the cost—which, together with what has been expended this year, will be charged to the ac-



count of profit and loss. The company will doubtless save more than the interest on this cost, by being enabled to dispense with the light locomotives heretofore used in transporting freight and passengers from one side to the other of the river.

Two substantial brick houses for the lodging and boarding the men engaged in the repairs of the road, have been erected during the year. I would recommend one or more to be built yearly until every division of the road shall have been supplied.

#### WATER STATIONS.

The ponds at O'Bannon's, Lagrange and Radford's have been enlarged, and a new one built at Bagdad. The station house, horse power, pumps and pipes for the Bagdad water station, and new horse powers for O'Bannon's and Lagrange are being completed. The present water station buildings are not as large nor of as permanent character as true economy would dictate. Whenever their enlargement becomes absolutely necessary, they ought to be renewed of stone or brick, and of a size sufficient to accommodate any future increase of business.

#### REPAIRS OF LOCOMOTIVES.

The repairs of locomotives have been reduced from 12 42-100 cents per mile run for the year 1856, to 7 40-100 cents for the year just closed—a result quite as favorable as could have been expected. Since the joint operation of this road and the Lexington & Frankfort Road went into effect, a great saving has been made in this department. Twelve locomotives and but one shop now do the service which was required of sixteen locomotives and two shops. This road is a severe one upon machinery, being composed of frequent and sharp curves upon grades as high as 61 feet to the mile for five consecutive miles. The machinery is from five to eight years old and has not the proportions and improvements of more recently built engines. Considering these facts, the machinery has been kept in excellent order at a very low cost.

Your company has now a joint interest with the Lexington & Frankfort Road of 65-94 in 12 locomotives, besides an absolute interest in four which were not required by the joint roads. It will be for the Board to determine what disposition shall be made of these four machines. They are now housed and carefully protected. Should the Lexington & Big Sandy Road be completed to Mt. Sterling in a year or two, they could be advantageously used by the joint roads in operating that portion of the Lexington & Big Sandy Road.

#### REPAIRS OF CARS.

Your road has a joint interest with the Lexington & Frankfort Railroad of 65-94 in the following cars:

- 10 First Class Passenger Cars;
- 4 Second Class and Baggage Cars;

94 Stock and Platform Cars;

56 House Cars;

2 Light Express Hand Cars.

It has in addition, not required by the joint roads, three first class passenger cars, to be disposed of according to the discretion of the Board.

There are also for the repairs of the road:

10 Four-Wheeled Ballast Cars;

13 " Light Ballast Cars;

20 Lever Hand Cars;

Which belong exclusively to your company.

The condition of these cars is fully equal to what it was at the commencement of the year, the depreciation having been made good by repairs and renewals. The expenses of this department have been very materially reduced.

#### FUEL.

The enhanced price of wood has increased slightly the cost of this item of expenditure. No reduction is likely to be made in the future, as the same cause will continually exist it to increase it.

#### BUILDINGS.

The repairs of the buildings have been quite heavy, caused by repairs and repainting to the iron roofs of machine shops and several station buildings.

The side track, seven miles from the city, recommended in my last annual report, as required for the convenient dispatch of the business of the road, will be built so soon as good roads shall have been opened to communicate with the public roads of the country.

In order to equalize the value of rolling stock, materials, &c., required for the joint business of your road and the Lexington & Frankfort Railroad, the latter company became indebted to you in the amount of \$6,224 56, which has been paid in cash. The two companies are now joint owners of the locomotives, cars, and all materials required for the operation of the roads in the proportion of 29 to 65, the respective lengths of the two roads. The materials and the cost thereof required for the repairs of the track, road bed, station houses, and all permanent fixtures, are charged to the company owning said track, road bed, station houses and permanent fixtures, according to the terms of the agreement for the joint management of the two roads. In October last a collision occurred between an extra passenger train and one of the regular passenger trains, in consequence of misapprehension of the rules by one of the conductors, by which the engines and cars were materially damaged.

During the same month two other casualties happened—one by the breaking of an axle, and the other by the running over stock, causing in both instances considerable damage to the cars. Fortunately, in none of these accidents was any passenger at all, nor was any employee of the company seriously in-

jured. Otherwise the trains have been run with great regularity.

The officers and employees generally have manifested commendable zeal and industry in the discharge of their several duties."

Our readers will perceive that the total cost of the 65 miles of road owned by this company is \$1,545,791 25, making a cost per mile of only \$23,781 40. The total debts of the road, too, are \$642,616 37, against a stock representation of \$739,919 40; and the net earnings have been \$110,440 33, or 7.14 per cent. on the total cost of the road. These are significant facts, and go to show that the road has been built and run economically and by competent hands. They stand in striking relief against the enormous figures run up by many, if we should not say most of the railroad companies of the Union—figures representing \$40,000, \$50,000 and \$60,000 per mile of railroad built. There is one thing, however, that we are sorry to see in the statement of this company. The President states, in reference to the sale of some of the new bonds of the company, that "these new bonds have been disposed of at such rates that the interest they bear and the discount from their amount will equal to the purchasers eight per cent. per annum on the sum paid for." These bonds have been disposed of at a discount. This we object to. A company in the position of this one should be able to dispose of their bonds at par. It is true that the interest paid (eight per cent.) is not an enormous one—hardly as much as money will command at the present time and in this section. The principle of selling one's own securities at less than par is what we object to. It is time our railroads asserted their position. Their securities are worth as much as the securities of banks or individuals, if they are worth anything; and if they are not worth anything, they should not be sold at any price.

#### ANNUAL MEETING OF THE ATLANTIC & ST. LAWRENCE R. R. CO.

The Annual Meeting of the Company was held Tuesday at the City Hall. The President, Mr. St. John Smith, presided. The Report of the Directors, on the affairs of the company for the past year, we give below in full. It shows them to be in a very satisfactory condition. The only business of importance that came before the meeting was the election of a Board of Directors.

The first ballot resulted in the election of the Board of last year. The vote stood as follows, the first nine persons being elected:

Whole number of shares represented, 9987.

St. John Smith had.....	9987
John B. Brown.....	9987
John M. Wood.....	9987
Charles E. Barrett.....	9987
Phineas Barnes.....	9983
George F. Shepley.....	9983
James L. Farmer.....	9976
Rufus E. Wood.....	9983
Solomon H. Chandler.....	9983
Ebenezer Burbank.....	47

To the Stockholders of the Atlantic & St. Lawrence R. R. Co.:

The Directors respectfully submit the following Report for the year ending June 30, 1857:

The road for the past year has been run by the Lessees, of the Grand Trunk Railway Company, of Canada, in connection with their lines of the road in the Canadas.

It has been kept in good repair, and to the



satisfaction of your Directors. Some of the bridges have been, and others are now being rebuilt.

The obligations you entered into with that company have been satisfactorily performed.

The amount of indebtedness on notes unpaid June 30, 1857, being notes given for depot lands in Portland, which have not and will not fully mature till 1862, \$10,000.

The whole amount of stock standing on the books of the company, June 30, 1857, was \$2,494,900, exclusive of 15,000 shares held by the city of Portland, as collateral security for loans of city bonds to that amount, which, being held as collateral, according to the provisions of the Acts authorizing the first and second city loans, are not entitled to dividends or votes.

The funded debt of the company is as follows:

City of Portland Bonds, loaned to the company	\$2,000,000
Bonds of the company dated April 1, 1851, on fifteen years, exclusive of those pledged to the city of Portland as collateral	938,000
Bonds of the company dated Nov. 1, 1853, on twenty-five years payable in sterling currency	484,000
Notes unpaid, before mentioned	10,000
Aggregate of debt	\$3,482,000
Amount of share capital	2,494,900
	\$5,976,900

Amount of the two sinking funds, June 30, 1857.....\$211,039 60

The Grand Trunk Road is completed and in use to Stratford, about 714 miles from this city; from Richmond to Quebec, 96 miles; and from Quebec to St. Thomas, 49 miles. A road from Toronto to Hamilton connects the Grand Trunk with the Great Western R. R., of Upper Canada, and one other connection will soon be completed between Stratford and London, in Upper Canada.

The work upon the Victoria bridge is going forward with activity.

The Canadian government have made arrangements for a weekly line of mail steamers to and from Liverpool, which will run to Portland about five months of the year, and wharves for their accommodation will be built this season.

The wharves and warehouses for the accommodation of the steamship "Great Eastern" are nearly completed.

The Reports of the Treasurer, and of the Commissioners of the Sinking Funds, will accompany this Report.

All of which is respectfully submitted.

Per order of the Directors:

ST. JOHN SMITH, Pres't.

OFFICE AT. & ST. L. R. R. Co.,  
PORTLAND, July 31, '57. }

**IMPORTANT RAILROAD SUIT.**—*The State on Information of Kennedy vs. The Indiana and Illinois Central Railway Company.*—We understand that Mr. Kennedy, the Prosecuting Attorney of this circuit, has filed an information against the above named company, the object of which is to annul the organization of the company, leaving it as though it had never existed. This makes the proceeding one of immense importance to the company and all who have had dealings with them. It is difficult to see what results may follow the successful termination of this suit—an event of which some of those who have examined the question speak with great confidence.—Among the grounds alleged for its dissolution are these: It was formed without any authority of law; it was not organized in conformity with existing laws for the organization of railroad companies.—*Ind. Journal.*

## GRAND TRUNK RAILWAY.

### REPORT OF THE LONDON DIRECTORS.

The London Directors of the Grand Trunk Railway Company, in transmitting the accompanying notice for a special general meeting to be held at Toronto, on the 25th proximo (in lieu of the notice for a meeting on the 29th instant, which had been sent in error from Canada,) avail themselves of the opportunity to submit to the Shareholders the following statements of the events of the last twelve months, and of the present position of the company.

The sections of the railway that were unfinished at the date of the last report, namely, from Guelph to Stratford 25 miles, and from Brockville to Toronto, 210 miles, were completed for traffic in October last year, thus making the total mileage of the Company 849 miles.

Previously to the opening of the above sections, the Chief Engineer of the Company reported that the original estimates for engines, rolling stock, and sidings, as revised by the Railway Committee of the Canadian Legislature of 1852, were insufficient, and that to carry on the traffic with effect, a considerable addition to this stock, and further sidings and station accommodation would be required.

It has therefore been found necessary to take active measures for obtaining a large additional supply of engines, as well as of passenger and goods cars. Orders have accordingly been given for forty-seven engines; of these, eight have been or are in the course of being built in England, thirty-two in Canada, and seven in the United States.

The number of additional goods wagons ordered this year has been 400, of which 100 were ordered at Hamilton, Canada West, 100 hundred in the United States, and 200 at the Company's workshops, Montreal.

About one half of the foregoing stock has already been delivered, and the remainder will be completed during the present summer.

A portion of the additional station accommodation has also been provided, and further accommodation will be added as the development of the business of the railway may render it necessary.

The London Directors, coinciding with the Government of Canada, deemed it of great importance that they should be in possession of a report from an engineer of high standing, wholly connected with the previous operations of the Company, upon the construction of the Railway, the character of the works, and the quality of the rolling stock supplied under the contracts. They therefore made arrangements with Mr. Chas. Hutton Gregory, C. E., for this purpose. Mr. Gregory left England last April, and the directors learn by their latest letters from Canada, that he has nearly completed his inspection, and that his return to this country may be expected before the close of the present month. Immediately after Mr. Gregory's arrival in England, the fullest information on the matters referred to him will be given to the stockholders. The Directors desire, in the meantime, to state their belief that the report will be of a very satisfactory character.

The works of the Victoria Bridge have been carried on successfully to the close of the last season. The two abutments and nine of the piers are now completed, and the iron-works for the tubes are in a state of proportionate progress.

In the statement which the London Directors submitted to the proprietors last year, the adoption of the Relief Act, passed in 1856, was recommended, and it was left to the Directors to urge upon the Government such modifications as might be considered advisable.

Accordingly, in the last session of the Canadian Parliament, application was made to the Legislature representing that the Act of 1856 did not afford that relief to the Company which its requirements demanded; and an Act has

been passed, a copy of which is transmitted herewith, (Appendix A,) by which, under certain conditions, the claim of the Province upon the Company in respect of the debt of upwards of three millions, is postponed to the payment of dividend to the shareholders at the rate of 6 per cent per annum.

The effect of this most important concession, for which the thanks of the shareholders are justly due to the Canadian Government and Legislature, is to place the share and debenture capital in the most favorable position, as will appear from the following statement, showing the comparative small amount of capital per mile at which the Grand Trunk Railway stands as affecting the question of future dividend.

The whole capital on which interest is payable at the present time, exclusive of the rent for the Atlantic and St. Lawrence Railway, is £5,144,900, made up as follows:

Preference Bonds created in 1856	
Amount paid up to 29th June	£276,190
Debiture capital issued	1,882,100
Share capital	3,040,700
	£5,144,990

To which must be added	
Balance of Preference Bonds created, but not yet issued, and balance of calls on Preference Bonds issued	£1,783,810
Balance of Debentures to Messrs Peto and Company on account of Victoria Bridge	61,300
Balance of Shares, ditto	174,950
	£2,020,060
	7,165,050

Thus making the whole Capital, including the cost of the Victoria Bridge and the other works required by the Act of 1856—viz: the extension East of St. Thomas and West of St. Mary's, and the contributions to the Three Rivers, Ottawa and Prescott, and Cobourg and Petersburg Railways, £7,165,050 in lieu of £12,900,000, the amount of capital authorized.

The shareholders will remember that the creation of £500,000 of C Debentures was authorized last year. These debentures are now only held in deposit as security for a part of the liabilities of the Company.

These liabilities amount to £601,805, and the sum required for additional stock, station, and other accommodation, is £503,622.

The accompanying notice of meeting specifies that the sanction of the shareholders will be asked for an increase of capital to the extent of two millions of pounds. The resolution, however, that will be submitted to the meeting will only ask for authority to issue an amount not exceeding one million and a half in debentures. £500,000 of this issue to be in substitution of the C debentures created last year, which will be cancelled.

The directors recommend that these debentures be created on the following terms, viz: that they rank immediately after the existing debentures of the Company, and bear interest at the rate of 7 per cent. per annum; and that one third be repayable in five years, one third in ten years, and one third in fifteen years.

The directors believe that no circumstances are likely to arise which will make the issue of the surplus shares, the amount of which is £1,585,300, necessary; and nothing will be done by them, with reference to this capital, without the sanction of the shareholders given at a general meeting.

In 1855, an independent company called "the Grand Trunk Junction Railway Company," obtained an act for the construction of a railway from the Grand Trunk Line at St. Mary's, nine miles west of Stratford, to London, a distance of twenty-two miles.

The directors of the Company have offered to transfer its rights to the Grand Trunk Company, at par, and as by means of this short line an important connection will be made with the Railways centering at London, it is very desirable that the sanction of the share-



holders should be given to the amalgamation of the two Companies, and to an agreement which has been made for the construction and equipment of the railway with responsible Canadian Contractors.

The cost, being at the rate of £8,000 a mile, including Rolling Stock, is included in the sum available under the Relief Act of 1856.

The accounts for the half year ending the 21st December, 1856, are sent herewith. The transmission of these accounts has been delayed, owing to the desire of the directors to be able to state, at the same time, the result of their application for relief to the Canadian Legislature. A copy of the accounts for the half year ending the 30th ult., will be forwarded to each shareholder immediately after their receipt in London.

It is unnecessary to say that time is required for the development of traffic in a new country such as Canada, and for the realization of that remunerative return upon capital which eventually follows. It is, however, the opinion of the Directors, having regard to the rapid progress of Canada, as well as of the regions further Westward, from which the Grand Trunk must derive a large portion of its traffic, that there is no reason for doubting the future prosperity of the Railway. It is obvious that the infancy of so large a system can afford no real test to its future greatness, and it is satisfactory to be able to add that the weekly returns of the current year show a considerable increase on the passenger traffic.

The following, among other arrangements now in progress, cannot fail to add largely to the revenue of the Railway.

A bill was passed in the last session of the Canadian Parliament, granting a subsidy for a weekly line of fast screw steamers from Liverpool to Montreal in summer, and to Portland in winter.

The Provincial Government has, it is understood, entered into an agreement with the Ocean Steam Company for this service, and the manner in which that Company has hitherto fulfilled the conditions of the existing contract for the fortnightly line, affords ample security for the future.

The Directors learn by their last advices from Canada that a traffic agreement of a very satisfactory character is nearly completed between the Montreal Ocean Steam Company and the Grand Trunk Company.

A monthly line of screw steamers, from Liverpool to Portland, calling at St. Johns, Newfoundland, and Halifax, was established at the commencement of this year, and the Directors are informed that it is about to be converted into a fortnightly line.

Other steamship proprietors have been in communication with the Company on the subject of running vessels in connection with the Grand Trunk Railway, and it is scarcely necessary to assure the shareholders that all proper encouragement will be afforded to such arrangements.

At the commencement of the present year a through traffic and emigration department was organized in the London office. The number of sub agencies in connection with it in England, Ireland and Scotland is rapidly on the increase, and a large amount of information, relating to Canada and through booking system has been diffused among the emigrating classes. Many of the persons who have already traveled through tickets, purchased previously to their leaving Great Britain, have communicated to their friends at home the excellence of the arrangements for their protection, and the comfort and speed with which they have been conveyed to their destinations. There can be but little doubt that the through system will extend greatly when it becomes better known. Hitherto there has been an impediment to its general adoption on the continent, in consequence

of there being in several States stringent laws against the system, but there is reason to hope that these will be relaxed, as regards the Grand Trunk Company, when the respective Governments are made aware by the reports of their Consuls and emigrants themselves, that it is worthy of confidence.

The period for the services of the Chief Engineer having expired, the London directors propose to select a gentleman from this country to act on behalf of the English shareholders in Canada, who, having a seat at the Board there, and representing the London Directors, will exercise a supervision over the management of the Railway, and co-operate with the directors in Canada, for the promotion of the general welfare of the undertaking.

(Signed) By order of the London Directors.  
C. P. RONEY, Secretary.  
Offices of the Grand Trunk Railway Company  
of Canada, 21 Old Broad Street, London.  
July 11th, 1857.

### THE FUTURE OF CALIFORNIA TRADE AND TRAVEL.

An intelligent and practical survey of tangible facts, and careful estimate of future probabilities, would lessen the zeal and check the enterprise of those who have been for a year or two past engaged in a desperate struggle for possession of the Nicaragua Transit Route, or the establishment of additional overland communications between the Atlantic and Pacific Oceans. A few days since, we expressed our views of the impracticability of the Tehuantepec route. There is no doubt that a road could be constructed in that region, so far as physical obstacles are concerned—for the engineering difficulties are not formidable. The insurmountable objection to the enterprise is, that it will cost an amount of money which cannot be raised without the exhibition of much larger promise of returns than any just estimate of probabilities will warrant.

The same is true of the Nicaragua Transit route, and the proposed Honduras railroad. All of these must rely chiefly upon the California trade and travel for support. Honduras, in time, would probably add something to the income of a railroad company by the development of her internal resources, but the amount would be inconsiderable compared with the extraordinary cost of constructing and working a road in that climate. Nicaragua can furnish very little local business for her transit, and Tehuantepec none at all. Each of these routes, then, must look to the California trade and travel almost exclusively for support. Neither of them can be availed of to any considerable extent for commercial purposes, because their length, or the necessity of repeated handling of merchandise transported by them will render the cost of freighting too great for profit.

These considerations reduce the reliable support of the projected roads to the single resource of passenger travel. We throw out of view compensation to be derived from carrying the mails—for that is a secondary item of comparatively small importance in estimating the profits of the roads. The most superficial observer must have noticed that the emigration of gold hunters to California has nearly or quite ceased. Mining has been reduced to a science, and is chiefly carried on now-a-days as a regular, steady, permanent business, by men of capital, or combinations of laboring men, who thus obtain many of the advantages of capital. Property of all kinds has reached a reasonable level, and all industrial or producing interests in the State, bear about the same relations there that they do here. The result is that the population is becoming steady and settled, instead of being constantly migratory, as a few years ago, when they poured their easily acquired gold dust into the pockets of steamer companies with unstinting hand.

To-day, a large portion of the emigration to California is from the west, and composed of agriculturists or persons who go out content to make moderate gains and with no anticipation of rapid fortune and quick return to the Eastern slope. At no distant day the wagon roads over the plains will be completed, and then the tide of emigration from the west will again pour across the plains, and through the mountain passes towards the Pacific. This result is inevitable. When the road is thus made easy and safe, the man in Missouri or Arkansas or Iowa, for instance, who proposes a journey to California, will see the economy of taking his team and going overland, instead of selling his little property to pay for tickets from New York by sea. The cost of getting to New York will nearly fit a man out for the trip overland; and when he arrives at his destination, he will then have his mules or oxen, and whatever stock he chooses to carry with him, all ready to go to work. The advantages will be so largely in favor of the overland route, that few persons west of the lakes will think of any other.

The causes we have thus enumerated will reduce the aggregate travel between the two oceans, by all the Isthmus routes, to such an extent that five hundred passengers each way per month will prove a high figure. Give all of this to one route, and calculate the price of the transit at \$25 per man—the rate charged by the Panama Railroad Company—and the following is the result:

1000 passengers per Month, at \$25.....	\$25,000
Gross receipts for one year.....	300,000
Deducting expenses, 50 per cent.....	150,000

Balance for dividends..... \$150,000

This would give an interest of six per cent. only on the sum of two and a half millions of dollars—a very moderate capital, and one which will not construct a quarter of either the Honduras or Tehuantepec roads. These are the details which prudent capitalists will consider when called upon to embark in inter-oceanic enterprises, and every man can judge for himself the value of the argument against multiplying them. We do not hesitate to say that these considerations will effectually prevent the consummation of the various projects we have been discussing.

There are only two inter-oceanic routes, in our judgment, which can ever be made permanently profitable. These are the Panama route and the route across Mexico from Vera Cruz to Acapulco. The latter, because of the large interior business and travel it would accommodate, could be made profitable as a local road, and any California business attracted to it would be incidental merely. The Panama route must always be valuable as a commercial route, because it is very short, and merchandise transported over it requires no handling between ports. Take from it, a year hence, all the California travel, if that were possible, and the prospect is that the deficiency would be more than made up by the rapidly increasing trade of the South Pacific and Central America, to say nothing of the concentration in that direction of the travel and trade between Great Britain and her Australian colonies, which will be effected within a few months. The entire line of transit by this route from Sydney to Southampton being 52 to 55 days. If a shorter sea route to California must be had, Central Mexico alone affords the transit route by use of which it can be sustained; and for commercial purpose Panama can never have a rival. Such are our convictions and such the basis of them, which we present to parties interested for whatever they may find them worth. If we are not greatly mistaken, they furnish abundant reasons why no considerable sum should be wasted by the United States in purchasing Tehuantepec grant from Mexico.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rst.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds	Name of Company.	Quot' of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Net Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al'xandria, Lon. & Hmp'r	173	5,000,000.00	.....	.....	209,475.46	110,246.38	none.
498,800	6			1862-3	2d	.....	Androsco'g'n & Kennebec	54.55	1,400,000.00	.....	.....	.....	.....	4 pr. ct. 6m
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange..	86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	8 pr. ct.	
52,646	6			now	"	.....	B'ngr, Old T. & Milford..	12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53	
500,000	7		N. Y.	1860	"	.....	Boston & Worcester..	44 6-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m	
500,000	7			1866	1st mortgage.	.....	Buffalo & State Line....	.....	1,300,000.00	.....	.....	.....	5 pr. ct. 6m.	
300,000	7			1857-9-62	Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
200,000	7			1864	Domestic.	.....	"	.....	.....	.....	.....	.....	.....	.....
577,187	6			1872	4th mortgage.	.....	Central Ohio..	.....	.....	.....	.....	.....	.....	.....
192,000	7			1874	1st mortgage.	.....	Champl'n & St. Law'r'nce	43	1,872,800.00	1,001,087.00	168,200.00	77,700.00	10 per ct.	
380,000	7				Domestic.	.....	Ch'r'l'te & South Carolina.	110	1,750,000.00	380,000.00	291,219.66	47 per ct.	\$72,300	
1,440,000	7			1864-7	1st mortgage.	.....	Ch'go, Burl'g'n & Quincy.	88..	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m	
1,300,000	6-7-8		N. Y.	1868-9	2d	.....	"	.....	.....	.....	.....	.....	.....	.....
374,000	8			1868-76	Convertible.	.....	"	.....	.....	.....	.....	.....	.....	.....
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa..	5..	1,761,149.16	2,241,500.00	221,491.96	.....	.....	.....
532,000					2d	.....	Cin. Wil'g'n & Zanes'ville	25..	.....	.....	.....	.....	.....	.....
104,000					3d	.....	"	.....	.....	.....	.....	.....	.....	.....
305,500					Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	103 1/2	4,741,220	.....	1 3,754	700,804	6 per cent.	
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning..	85	1,500,000.00	.....	.....	.....	.....	.....
400,000	7			1864	2d	.....	Cumberland Valley.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24	
500,000	6			1873	Dayton & Cin. short line.	.....	.....	52	1,000,000.00	1,000,000.00	.....	.....	.....	.....
500,000	6			1857-8-0	1st mortgage.	.....	Eastern Railroad..	93 6-10	3,345,000.00	.....	665,578.79	288,007.84	\$234,133	
350,000					1st mortgage.	.....	East Ten. & Virginia..	120	625,450.00	.....	30,897.20	19,092.30	.....	
740,000	7				Essex Railroad..	.....	.....	20	700,000.00	.....	.....	.....	.....	.....
88,000	10			1869	1st	.....	Evansville & Crawf'd'vle	109	2,228,657.30	.....	243,970.42	136,061.90	\$133,221.45	
400,000	7			1861	2d	.....	The Fitchburg (Mass.) R.R.	.....	2,540,000.00	.....	681,162.52	213,837.81	3 per cent.	
200,000	10			1864	1st mortgage.	.....	Fox River Valley..	33	800,000.00	.....	.....	.....	.....	.....
						.....	Fair Haven Branch..	15	300,000.00	.....	50,381.33	14,822.45	\$166,240.00	
						.....	Georgia R.R. & Banking Co.	233	4,156,000.00	.....	1,008,202.57	357,689.42	\$166,240.00	
						.....	G't Falls & Conway R.R.	20	.....	.....	27,576.69	14,207.07	.....	
						.....	G't West'n R.R. of Can.	281 1/2	4,191,550.00	.....	2,062,836.00	176,529.92	8 pr. ct.	
						.....	Housatonic Railroad..	74	2,000,000.00	.....	339,196.50	176,529.92	.....	
						.....	Hudson River..	22	4,000,000.00	.....	1,924,382.44	718,037.40	.....	
						.....	"	144	4,000,000.00	.....	.....	.....	.....	.....
						.....	"	144	4,000,000.00	.....	.....	.....	.....	.....
						.....	Illinois Central R. R....	117 1/2	704	18,453,376.00	1,476,035.27	1031499.08	7 pr. ct.	
						.....	"	704	3,558,376.00	.....	.....	.....	.....	.....
						.....	Indiana Central.....	48	72 1/4	.....	354,871.00	.....	3 pr. ct.	
						.....	Iron R. R.....	13	123,700.00	.....	.....	.....	.....	.....
						.....	Kentucky Cen. 2d Div..	.....	719,500.00	.....	.....	.....	.....	.....
						.....	Knoxville & Kentucky	.....	.....	.....	23,233.59	14,233.59	.....	.....
						.....	Laurens (S. C.) R. R..	32	166,000.00	.....	.....	.....	.....	.....
						.....	Louisville & Nashville..	184	.....	.....	50,234.71	14,149.13	\$8,000	
						.....	Lowell & Lawrence	12 3/5	300,000.00	.....	587,236.57	162,277.50	10 pr. ct	
						.....	Mad River & Lake Erie..	.....	.....	.....	.....	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Manchester & Lawrence.	26	1,000,000.00	.....	.....	.....	\$24,000	
						.....	Marietta & Cincinnati...	17 1/2	.....	.....	.....	.....	.....	.....
						.....	Mexican Gulf R. R....	27	10,000,000.00	.....	253,498.98	162,802.24	.....	.....
						.....	Milwaukee & Horicon..	30	600,000.00	.....	194,752.42	55,501.74	7 pr. ct.	
						.....	Mineral Point R. R....	32	922,500.00	.....	7,707,348	3,609,481	2 pr. ct. 6m	
						.....	"	32	2,697,090.00	.....	.....	.....	3 pr. ct. 6m	
						.....	"	32	2,697,090.00	.....	.....	.....	.....	.....
						.....	Mobile & Ohio..	497	10,000,000.00	.....	.....	.....	.....	.....
						.....	Nashua & Lowell R. R..	15	600,000.00	.....	.....	.....	.....	.....
						.....	New Haven & North'm'n	55	922,500.00	.....	.....	.....	.....	.....
						.....	New York Central..	83..	23,067,400	14,763,807	7,707,348	3,609,481	2 pr. ct. 6m	
						.....	N. Y. & Harlem R. R....	10 1/2	5,717,100.00	.....	1,040,393.26	61,678.71	\$37,692.20	
						.....	" " " Pref.	25	.....	.....	.....	.....	.....	.....
						.....	N. Y., Prov. & Boston..	50	1,588,000.00	.....	245,713.00	51,544.40	.....	.....
						.....	N. Lon., Wil'm'ntu & Pal.	66	1,700,000.00	.....	120,371.50	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Pontchartrain R. R....	5	500,000.00	.....	.....	.....	.....	.....
						.....	N. O., Opelousa & Gr't West.	.....	6,000,000.00	.....	116,795.00	366,118.80	7 pr. ct.	
						.....	N. Y. & New Haven..	62 1/2	3,000,000.00	.....	1,007,666.48	.....	.....	.....
						.....	North Western Va. R. R.	103 1/2	.....	.....	.....	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Northern (N. Y.) R. R....	118	2,000,000.00	.....	600,000.00	.....	.....	.....
						.....	North Missouri R. R....	19 1/2	.....	.....	23,176.74	88,458.56	2 1/2 pr. ct.	
						.....	Norwich & Worcester R.R.	60	2,111,500.00	.....	304,236.33	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Ogd'nsb'te, Clay't'n & Rome	.....	.....	.....	.....	.....	.....	.....
						.....	Ontario, Simcoe & Huron	94	.....	.....	289,690.10	137,875.93	5 pr. ct.	
						.....	Orange & Alexandria R.R.	83 3/4	2,937,500.00	.....	276,539.02	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Peoria & Bureau Val. R. R.	47	1,500,000.00	.....	.....	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Philadelphia & Trenton..	28 1-5	1,000,000.00	.....	.....	.....	.....	.....
						.....	Portsmouth & Concord..	47	.....	.....	.....	.....	.....	.....
						.....	Potsdam & Watertown..	76	2,000,000.00	.....	.....	.....	.....	.....
						.....	Rutland & Washington..	62 1/2	950,000.00	.....	68,325.42	.....	.....	.....
						.....	St. Louis & Iron Monn. R.R.	86	6,000,000.00	.....	.....	.....	.....	.....
						.....	Salem & St. Louis R. R..	168 3/4	400,000.00	.....	.....	.....	.....	.....
						.....	Snd'sky, Mansf'd & Newk	116	.....	.....	.....	.....	.....	.....
						.....	Sullivan Railroad..	26	500,000.00	.....	75,246.06	17,378.08	11m. 12 pr. ct	
						.....	"	.....	.....	.....	.....	.....	.....	.....
						.....	Tennessee & Alabama..	145	.....	.....	39,586.44	.....	.....	.....
						.....	Terre Haute & Richmond	73	1,294,450.00	.....	.....	.....	.....	.....
						.....	Toledo, Wabash & Western	242	1,000,000.00	.....	.....	.....	.....	.....
						.....	Troy & Boston..	.....	.....	.....				



# LONDON QUOTATIONS OF AMERICAN STOCKS AND BONDS.

July 31st, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858, ..	"	"
Cin. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	"	60
Erie, 3d Mortgage, 1883, ..	"	78
" Sinking Fund, ..	"	73
" conv. 1862, ..	"	62
Grand Trunk (Canada) Debenture, ..	"	87
Great Western " conv., ..	"	107
" " non-conv., ..	"	109
Illinois Central, 1st Mort., 7 $\frac{1}{2}$ %, ..	"	87
" " with option 70 per cent. shares till Jan. 1858, ..	"	103
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	"	82
Little Miami 1st Mort. not conv. 6's, ..	"	"
Marietta and Cincinnati, 1st Mort., ..	"	"
Michigan Central, conv., 8's, 1860, ..	"	90
do do do 1869, ..	"	90
N.York Central. No Mort. Not conv., 6's 80	"	82
" conv., 7's, ..	"	89
Ohio and Mississippi, 1st Mort., ..	"	"
Ohio and Pennsylvania, Income 1872, ..	"	65
Panama. No mort. conv. 1866, ..	"	"
Pennsylvania, 1st Mort., conv., ..	"	86
" " Sterling, 2d Mort., ..	"	90
Steuenville and Ind., 2d Mort., ..	"	"

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

### MERCHANTS' EXCHANGE AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending August 19, 1857.

## BONDS.

Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	80
Cincinnati, Hamilton & Dayton R. R. Co. 7 per cent. 1st Mortgage Bonds, ..	88
Do. 2d do do ..	82
Covington & Lexington R. R. Co. 6 per cent. 1st Mortgage Bonds with interest, ..	67
Do. do. 7 per cent. 2d Mortgage with interest, ..	68
Indianapolis & Cincinnati R. R. Co. 7 per cent. 2d Mortgage Bonds, ..	80
Ohio & Mississippi R. R. Co. 7 per cent. 2d Mortgage Bonds, ..	55
Hillsborough & Cincinnati R. R. Co. 7 per cent. 1st Mortgage Bonds, ..	50
Covington & Lexington R. R. Co. 10 per cent. Income Bonds, ..	65
Indiana Central R. R. Co. 10 per cent. Income Bonds 90	
Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds, due 1866, ..	85
Little Miami R. R. Co. Dividend Scrip., ..	80
Cin., Ham. & Dayton do do inc. int., ..	120
Indianapolis & Cin. do do do ..	70
Cincinnati 6s of 1884, ..	80
Central Ohio R. R. Co., 4th Mortgage Bonds, ..	25
Cincinnati & Chicago R. R. Co. Real Estate Bonds various, ..	15 to 25
State of Ohio Township Bonds, various, ..	40 to 50
do do County do do ..	80 to 90

## STOCKS.

Little Miami R. R. Co., ..	89
Columbus & Xenia, ..	87 $\frac{1}{2}$
Cin., Hamilton & Dayton, ..	67 $\frac{1}{2}$
Indianapolis & Cin., ..	64 $\frac{1}{2}$
Indiana Central, ..	48
Covington & Lexington, ..	18
Marietta & Cincinnati, ..	17
Hillsborough & Cincinnati, ..	17
Mad River & Lake Erie, ..	15
Ohio & Miss., ..	11 $\frac{1}{2}$ to 12
Eaton & Hamilton, ..	18
Junction (Ind.), ..	7 $\frac{1}{2}$ to 8
Farmers' Bank of Ky., ex-dividend, ..	118 $\frac{1}{2}$
Ohio Life 1 s. & Trust Co. Bank, ..	100

## MONETARY AND COMMERCIAL.

The past week has shown decided symptoms of increasing activity in business, and with it an increasing demand for money. The crops from the country are beginning to come in and we notice considerable movement in new wheat and grains which are already gathered. This flow of the cereals to the eastward will have a tendency to reduce the price of exchange and bring back considerable currency.

Discounts are more sought after by produce dealers, and the idle capital of the city will most probably be quite fully occupied for some time to come. We quote prime paper at 10@12 per cent. Other varieties at 15 to 24 as per agreement and necessity.

In New York we notice what we consider an unfavorable symptom—large imports of goods and large exports of specie. The discount lines were not drawing seriously tighter, although there was greater demand for money than at previous dates.

The stock market was feverish and fluctuating. Michigan Central had reached very low figures as will be seen by our stock quotations. The rumor of over issue of stock as will be seen by the correspondence in our reading columns was denied. The president of the company has, however, resigned.

We subjoin our usual quotations from Hewson & Holmes' Circular.

In addition to the usual dullness incident to the season of the year, from the absence of buyers and the heat of the weather, our market is greatly depressed; this is also aided by the enormous decline which has taken place in the last few weeks in the New York market in several prominent railroad securities, which had previously maintained a high value and were regarded by many prudent capitalists as safe and desirable investments. It is not our purpose to inquire into the causes which have produced this decline, but to suggest to dealers and capitalists that, while there may be corrupt and profligate management of the affairs of some roads where this decline is made apparent, the development of which is now producing its legitimate fruits, it does not necessarily follow that all securities should be involved or affected by this decline. There are railroad companies still left whose affairs are honestly and prudently managed, and whose securities, in view of the increasing business which must follow abundant harvests and a generally healthy condition of trade, will not only prove safe but profitable investments. The good sense of operators and capitalists will soon enable them to discriminate between companies prudently managed, whose Directors are largely interested in its securities, without any floating debt, and those companies whose earnings, though very large, are consumed by large salaries, foreign agencies, ruinous high rates of interest on large and continually increasing liabilities. Capitalists will soon cease to purchase for investment the securities of any road which has any considerable debt outside of its funded debt, and as a general principle, no road should make a dividend to its stockholders while owing any current debt. In the end such debts are all paid out of the stock, either by its utter annihilation, if permitted to go unprovided for, or by an appropriation of its surplus earnings.

We have no transactions of interest to record. The effect of the late disasters in New York will soon wear off, and we shall have an active market, with an increasing value for all sound securities.

The sales of the week have been made within the range of our quotations, which do not vary, except in one or two instances, from those of last week.

Money is in more active demand, caused by large purchases of wheat and flour; but good paper can be readily passed at fair rates.

Exchange on New York is less firm, at the rates of last week; the supply is evidently increasing; we doubt if present rates can be sustained. New Orleans funds are very dull.

## SALES AT THE NEW YORK STOCK BOARD—Aug. 15.

\$5,000 Tenn. State 6's, '90, ..	85
3,000 Virginia 6's, ..	91 $\frac{1}{2}$
1,000 Missouri State 6's, ..	78 $\frac{1}{2}$
2,000 Erie R. R. 3d Mortgage Bonds, ..	59
4,000 Hudson Riv. R. R. 3d Mortgage Bonds, ..	90
500 Illinois Central R. R. Bonds, ..	45
2,000 La Crosse & Mil. Land Grant Bonds, ..	28
5,000 Lake Erie & W. 3d Mortgage, ..	80 $\frac{1}{2}$
130 shares New York Central, ..	31
50 " Milwaukee & Miss., ..	50
142 $\frac{1}{2}$ " Erie, ..	31
10 " Illinois Central, ..	136
10 " Cleveland & Pittsburg, ..	37
50 " Reading, ..	69 $\frac{1}{2}$
800 " Mich. S. & N. Ind., ..	33 $\frac{1}{2}$
74 " do do do pref., ..	65
300 " Cleveland & Toledo, ..	49
75 " Chicago & Rock Island, ..	93
260 " LaCrosse & Milwaukee, ..	31 $\frac{1}{2}$

The following is a comparison of the earnings of some of the principal Railroads for the month of June 1856 and 1857:

	1855.	1857.
New Jersey Central, ..	\$41,241	\$65,811 Inc. \$24,596
Michigan Central, ..	267,393	244,373 Dec. 23,024
Cin., Ham. & Dayton, ..	37,464	37,546 Inc. 81
Mad River & L. Erie, ..	51,541	52,941 Inc. 1,490
Baltimore & Ohio, ..	434,965	423,922 Dec. 10,742
La Crosse & Milwau., ..	49,059	60,532 Inc. 11,472
Chi., St. Paul & Pon'te., ..	24,869	64,472 Inc. 39,602
Mich. Southern, ..	267,898	244,393 Dec. 23,524
Chi. & Rock Island, ..	142,442	161,872 Inc. 19,459
Illinois Central, ..	192,935	201,000 Inc. 8,065
Chi. & Burlington, ..	163,578	235,749 Inc. 71,171
Norwich & Worcester, ..	26,778	25,188 Inc. 1,589

The earnings of the Milwaukee and Mississippi Railroad for the month of June, are, .. \$11,127  
Corresponding month of last year, .. 66,086  
Increase, .. \$50,941

## EVANSVILLE AND INDIANAPOLIS STRAIGHT LINE ROAD.

The Board of the Evansville, Indianapolis and Cleveland Straight Line Railroad Company met on Thursday. Hon. O. H. Smith, President, delivered his retiring address, positively declining a re-election. James Jones, Esq., of the city of Evansville, representing the stock of the city, gave, at the election that followed, at 1 o'clock, 2,606 votes for the opposition ticket to the old Board; however, the vote for the old Directors was 9,729. The new Board organized by the election of Hon. Jeremiah Smith, President; Henry D. Allis, Vice-President; and James Greene, Secretary and Treasurer. Hon. Oliver H. Smith was appointed by the new Board Attorney for the Company, with directions to bring suit immediately against the city of Evansville for the last \$100,000 of her subscription due and unpaid. Mr. Carpenter left yesterday for the East, having received important letters from England, on the subject of his pending negotiations.

We believe that this road will be constructed. The grade, so far as it is completed, make road bed unsurpassed, if it is equalled, by any other in the State. It passes through a country rich in agricultural and mineral resources, which will contribute largely to its business.—The energy and determination of Willard Carpenter will never tire until success has crowned his efforts. The bonds of the city of Evansville would have materially forwarded the enterprise, and the refusal of the Council to issue them may delay somewhat its progress, but will not defeat its ultimate construction. When completed, the road will prove of great benefit to the business of our city. The people of Indianapolis should not only give this enterprise material aid, but their encouragement and influence. It would bring to our city a portion of the trade of the rich White River Valley, which now seeks a southern outlet.—Ind. Sent. Aug. 5.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by  
VOSE, LIVINGSTON & CO.,  
Feb 19-1m 9 South William street, N. Y.



[From the Journal of the Franklin Inst. for July, 1857.]

### DISCUSSION ON JOINTS OF RAILROADS.

At an adjourned meeting (June 25) the discussion was continued, Dr. B. H. Rand, Secretary, *pro tem.*, President Cresson in the Chair.

Charles E. Smith exhibited a model 16 feet long, showing a section of track laid with miniature U rails, on a 5 feet gauge—to represent the yielding nature of the ground, the rails are laid on cross-ties of India rubber—four joints were made. 1. Without any chair or underplate, the rails meeting directly on a tie, and being confined by hooked spikes. 2. With a short underplate upon a tie. 3. With a long underplate covering three cross-ties, but merely loosely placed. 4. With a long underplate, like No. 3, but firmly rivited to the base of the rails. Upon this model track a heavily weighted four-wheeled carriage was placed.

When this carriage was moved along, the action of the joints was beautifully illustrated. No. 1 sunk into the elastic tie, and made a palpably bad joint. No. 2 was better, but still sunk too much. No. 3 yielded less, but yet very perceptibly. While No. 4 did not yield at all, and, move the car fast or slow, it appeared to be quite as strong as the rest of the rail.

With this model he had closely studied the question of joints, and he had reached the conclusion that, *with equal tie spaces, the weakness there was precisely 50 per cent. of the strength of the rails.*

He therefore provided an iron splicing, or fish bar, with a projecting rib, and attached it underneath the rails, whether U or T, by riviting to the base. This fish bar covered not less than three cross-ties; it had just half the sectional area and half the strength of the ordinary 60 lbs. rail usually employed in this country, and in practice he had found it entirely successful. It had been used upon the mountain division of the Pennsylvania Railroad, on the heavy grade under pushing engines of great weight—on a railroad in Georgia—on the Camden & Atlantic Railroad—and on the Mine Hill Railroad (a heavy coal road) one trial mile had now been down for some years, and had carried seven millions of tons of coal without impairing the joints—this important fact was vouched by the President of the Institute, who is also the chief officer of that road. *This splice costs \$2 per joint.*

Mr. Smith went on to describe the mechanism of the strains to which railroads are subjected, and considered it self-evident that the striking of joints and joint ties was the result of vertical weakness, and could be gotten rid of entirely by augmenting their strength just 50 per cent. by some substantial splice.

He thought there were some objections to Barr's fish plates, and that Trimble's wooden splice would not be entirely satisfactory.

I. R. Trimble, C. E., stated that in 1856, when placed in charge of the Baltimore & Susquehanna Railroad, he had just returned from England. He had found their rail tracks much smoother and better than ours, but no settled system of joints. He early noticed the great defects of our railroad joints, and gave the subject very close attention. He soon perceived that it was idle to attempt an effectual strengthening of the joints by any short splice, or by any form of chair whatever, depending upon a single cross-tie. He saw that three cross-ties at least must be covered, and their united strength of foundation brought in aid of the joint. He made a model, and also tried a joint suspended between two ties, now

a favorite plan, then first attempted (he believed) by himself.

His first idea was to strengthen the joint by a substantial block of wood, capable of furnishing the requisite strength, and he tried a wooden splice underneath the rails—sinking three ties at the joint four inches lower than the rest, to admit it. This worked tolerably well, but owing to the inequality of depth in the foundation, it did not meet his wishes fully.

He was then called to the charge of the Philadelphia, Wilmington & Baltimore R. R., and found it in a very bad condition, especially at the joints; to these he gave his attention, and at first fished them with strong side plates of wrought iron, which for a time made a very good road, but the bolts would not stand, though he tried both screw-bolts and key-bolts. Finally, he provided a traveling forge, and rivited up hot all the fish plates of the line. Now he supposed all was secured, and for four months it made an excellent track, but then the rivets began to break, and he was eventually forced to abandon the plan of fish jointing with iron.

He now recurred to the study of the wooden fish splice, and tried it in a modified form in 1850, using an iron fish plate inside, and the wooden splice outside. Finally, in 1851, he omitted the iron fish plate inside, and used the wooden outside splice alone, in the form patented by him. He found this to furnish all the vertical strength necessary to make the joint smooth, all the lateral stiffness required, and all the elasticity necessary to preserve the rolling stock.

This splice had now been in use six years; it was employed upon many important railroads, and was giving very general satisfaction.

It was fully ascertained, by experience, that the wooden splicing pieces outlasted the cross-ties, and that after the first general screwing up, which was found necessary to meet the shrinkage of wood, nothing more was required during the life of the cross-ties upon which the splices rested.

The track-masters whom he had consulted as to the practical working of his splice, assured him that with it the joint ties gave them no more trouble than the intermediate ones; and this he considered as adequate proof of the equality of strength given to the track by the application of his wooden splices.

As engineer of the Baltimore Central Railroad, he had adopted a form for the superstructure of the track which combined some novelties.

The rail was to be double-headed, so as to admit of turning. It was to be perfectly flat on top, and he had planned it with a flat head of 3 inches wide—but financial considerations caused him to reduce it to 2 $\frac{3}{4}$  inches flat head, 4 $\frac{1}{2}$  high,  $\frac{3}{8}$  stem, and 57 lbs. weight per lineal yard.

He thought a good rail should have at least 3 inches flat head, to stand the momentum of the driving-wheels of the modern locomotive, which, if bearing upon an inch wide only (as usual) exert an action superior to the tenacity of iron, and hence our rails fail so rapidly.

He intends to use this double-headed rail without any underplates, and to abandon in this track the use of the hook-headed spike. He will use a long outside wooden splice at each joint (7 feet long, 4 by 6 inches), and inside wooden splices (2 $\frac{1}{2}$  feet, 3 by 4 inches), at each joint clearing the flange, and also over every alternate sill space throughout the track. These will be bolted to the ties by

straight spikes with square heads, and chisel points of the simplest possible form, and made by machinery.

He thought a joint thus spliced, *inside and out*, by wooden fish pieces neatly wrought to fit the hollow of the rail, would cost about \$1 20 each, but that in a mile of track the cost of this improved method of laying railroads would but little exceed that of the usual imperfect plan, with wrought iron chairs.

He thought, in reference to the rapid wear and tear of rails recently noticed, that much is owing to the greater hardness of ballast and firmness of bed in our modern roads.

He remarked upon the Washington Railroad, with which he is quite familiar—this line is laid with a very light rail, on a continuous bearing of wood, and the road is very imperfectly ballasted, yet it has stood better than any rail of its weight in the country.

This elastic track, this support of the rail upon a cushion of wood, is what he has endeavored to imitate in his method of splicing.

Mr. Trimble concluded with some interesting general remarks, bearing collaterally upon the subject in hand.

Samuel J. Reeves thought in this discussion the momentum of the locomotive was a very material matter, and that the force acting upon the joints of a railway at the tread of the driving-wheel ought to be closely studied by our engineers in connection with this question.

There could be no doubt that any divided bar could be so spliced—top, sides or base—as to equal its strength elsewhere, and this could be done in several ways; the question here appeared to be between bolting or riveting on a fish plate and the sleeve attachment formed by the ordinary chair.

He thought a neatly fitting chair, embracing as with a sleeve the base of the rail, and extending over three cross-ties, would be found to fish the joint in an adequate manner.

He was making a neat wrought iron chair (which was shown, and is certainly unexceptionable in its workmanship), weighing 1 $\frac{1}{2}$  lbs. per inch forward, and which could be furnished, cut off to any length, at 5c. per lb.; at this price a joint chair, 28 inches long, would cost about \$2. And this might be regarded as the price of a joint fished with a long sleeve chair of their plan.

Their 10 lb. chair was highly approved by many eminent engineers, and as an evidence of its popularity he might mention that their orders at this moment were for over 60,000 chairs of the pattern exhibited.

He made a number of interesting observations relative to the rails of railways, and expressed the opinion that the durability of a rail depended much upon the manner in which its work was imposed.

Thus he thought that if a new rail was worked at first with very light machinery, and then with heavier and heavier, a sort of consolidation of atoms would be produced highly favorable to the life of the rail. Just such had been the actual process to which the original rails of the Reading Railroad had been subjected, and he thought it had much to do with their acknowledged excellent wearing.

In support of this peculiar view, he stated the fact, personally known to himself, that the good old rails of the Reading Road, when re-rolled, and put at once to heavy work, though in heavier masses now than formerly, showed none of their former superiority over other rails.

Prof. Fairman Rogers, C. E., thought ver-



tical fishes stronger and better than flat fishes underneath, unless the underplates were rolled with an attached rib, as in Smith's splice, and securely rivited to the base of the rails.

He said that all the joints which had been under discussion, or which he had seen in use here, he had also seen in use in Europe; though he did not pretend at this time to decide upon their priority.

J. Dutton Steele, C. E., stated that in his experience no form of continuous bearing, either of wood or iron, would answer for the tracks of heavy railroads—for want of elasticity; and this must be borne in mind in every plan for strengthening joints; we must take care not to make them too rigid—if we do they will unquestionably fail.

He instanced the Barlow rail—the large saddle rail—with a base a foot wide, to be placed directly upon the ballast. An experimental mile of track, with this Barlow rail, was some time since laid upon the down track of the Reading Railroad for trial.

At first this track, so laid, was very smooth and agreeable, but under the heavy traffic of the Reading Railroad, it did not endure six months; owing to its extreme rigidity, it was rapidly disintegrated under the wheels, and literally battered to pieces by their heavy locomotives. It became excessively rough and unsafe, and had to be removed before the expiration of a single year.

Mr. Steele expressed the opinion, as the result of his large experience, that light rails, *per se.*, were better than heavy ones; and that we should study only to secure in a rail such weight and strength as was necessary to carry the heaviest locomotive without deflexion—that point once gained by a given section, he considered any additional weight added to the rail as being worse than useless.

He said that the breakage of rails was much more frequent on all railroads than any one thought of who was not engaged in their supervision and maintenance. Some elasticity in the track would often avoid this evil, which was becoming quite a dangerous one, and could not probably be wholly obviated by the manufacturer.

The general result of this discussion seems to have been, that while no one plan of railway joint appears to have commanded the general approbation of the professional members of the Institute, nevertheless several excellent spliced joints are now in successful use upon our railroads under a heavy trade. Without pretending to decide the relative merits of these, we will enumerate them in the order of their cost.

1. Trimble's single wooden splice, cost 80 cents each.
2. Steele's combined joint, cost 100 cents.
3. Trimble's double splice (of wood) cost 121 cents.
4. Smith's T iron under-splice, cost 200 cents.

All these have approved themselves to be good in actual practice, under heavy traffic, except No. 3, which in this precise form has never yet been tried, but it is evidently only a modification of No. 1. Some meritorious joints were before the Institute as being *proposed*, but as they have not yet been tested under heavy trade, we need not particularly name them at this time.

What seems to be wanted in the joints of railways is the same strength there as the bar has elsewhere, and that the entire track should rest upon wooden cross-ties and good ballast, all carefully placed, with the view of

obtaining absolute uniformity of strength (or of resistance to the rolling load), combined with a uniform elasticity adequate to protect both superstructure and rolling stock from the destructive agency of impact and vibration.

#### RAILROADS AND EMPIRE IN INDIA

Herapath's *Railway Journal* makes the following remarks on the present condition of India.

"There is nothing like leather," some may think; but in speaking of railways in connection with the disastrous revolt in India, we are not expressing simply our own special views, but those which are entertained by public men, and presented as the expression of public opinion by the press. In reference to the remedy for these disasters, the first wish of every man is, that we had adequate steam-power to convey troops there; but a stronger declaration is, that had we, as we ought by this time to have had, an adequate system of railways in India, the revolt could hardly have occurred, or would have been long since suppressed.

What Sir Macdonald Stephenson and John Chapman talked of and wrote of, the military value of railways in India, and which was treated by the Indian Government as little better than talk, is now a military and political maxim confirmed by the the saddest experience. Had Stephenson's East India line been integrally carried out at once, instead of halting at Raneegunge, it would now be at Delhi; and if the Government of India had paid every million that it cost, the Government of India would at this moment be richer and happier. The main trunk line is, however, stopped at Raneegunge, and a loop line by Rajmahal is likewise halting; and the Government of India has no military aid from this great engine of warfare, the instrument of transport; for in war, the masters of the art tell us whether Napoleon or Wellington, that it is not men, not numbers, that are of import, but the power of moving them with certainty and rapidity. The troops now marching on Delhi march eleven miles per day, each man with nine camp-followers, and they halt on the seventh day to give the necessary rest to the beasts of burthen, the Buffaloes, horses, and elephants. There are however, the steamers. At the time of the year in question, the Indian General Steam Navigation Company's steamers make the passage from Calcutta, not to Delhi, but to Allahabad "nights, all ordinary stoppages, grounding, detention at the stations, &c., included" in 20½ days. The railway as laid down by Sir Macdonald Stephenson, approved and guaranteed by the Government, and to be finished, though the Canadian railways of the same length were finished off-hand, would have taken the European troops and reinforcements from Calcutta to Delhi, not in 80 days' march, not in a 20½ days' voyage, but by a 20 hours' train.

In 20 hours—in one day—would the staff and troops have been conveyed—in two days would the heavy equipments and stores have been conveyed. In that time will the American railways take a whole shipload of emigrants with their luggage 1,000 miles from New York to the lakes.

These are facts known to every commercial man, and which speak for themselves in the City, but which do not speak to the Board of Directors of the East India Company, or the Board of Control. They are still haggling with the existing Companies whether the en-

gineers shall lay down this sleeper or that, and whether one pound or thirty shillings a ton more freight shall be paid for rails, and still keeping the Oude, the Eastern Bengal, the Northern Bengal, and the Simla railways at bay for their guarantees. With regard to the three former, their practicability has been proved by the surveys of the engineers of the Government itself; and as to the commercial and political necessity of all these lines, there is no doubt the Government of India, or rather, the complication of red tape, is too prudent to make railways in India beyond their own fixed rate; not because the railways are not wanted, or the money cannot be got, but because the choose to limit the rails which are to be carried out to the tonnage which can be carried at dead freight, and when a slight advance of freight would give any necessary amount of tonnage. This is really and truly one of the chief crotchets which at the present time has brought Indian railway enterprise to a dead stand. Another is, the subjection of every detail of construction and working to that Gordian congeries of red tape, the Government or Governments of India.

At a time when it is evident that the military maintenance of India requires an augmentation of thirty thousand Europeans to be placed in the hills—because only one European dies in the hills for two in the plains—nothing has been done for the railways to the hills, the Northern Bengal, Railway and the Simla Railway; and probably nothing will be done for this or any other branch of railway enterprise, until the voice of public opinion, and the determination of the Imperial Government shall have compelled immediate action.

When the Santhal insurrection broke out, it was seen that the completion of the East Indian Railway would have afforded means for its instant extinction. Now we have to regret that, had the East Indian Railway been complete, the massacres of Meerut and Delhi could never have been perpetrated. Shall we wait longer?

BALTIMORE & OHIO R. R.—The official report of the business of this road shows the revenue for the month of July to have been as follows:

	Main Stem.	Wash. Branch.	Total.
For Passengers.....	\$ 69,568 50	\$ 28,837 71	\$ 98,406 21
For Freight.....	337,815 38	8,378 78	346,194 16
	\$407,183 88	\$37,216 49	\$444,400 37

A comparison of these receipts with those for July, 1856, shows the following result:

	Main Stem.	Wash. Branch.	Total.
July, 1857.....	\$407,183 88	\$37,216 49	\$444,400 37
July, 1856.....	391,198 87	37,130 56	428,329 43

Increase.....\$15,985 01 \$112 93 \$16,097 94

Showing an increase of \$15,985 01 on the main stem, an increase of \$112 93 on the Washington branch, and a total increase of \$16,097 94. Of the increase on the main stem six thousand is from passengers, and nearly ten thousand from freight.

The financial year of the company commenced with October. The receipts of ten months of the present year, compared with those of 1855, are as follows:

	1856.	1855.
October.....	\$471,391 12	\$420,867 49
November.....	424,758 94	398,190 36
December.....	466,103 77	438,102 50

	1857.	1856.
January.....	301,773 29	188,820 78
February.....	355,398 97	190,383 73
March.....	548,262 48	404,976 82
April.....	461,048 39	550,226 25
May.....	383,995 84	477,575 88
June.....	423,922 55	434,665 37
July.....	444,400 37	428,329 43

	\$4,264,986 72	\$3,932,121 73
--	----------------	----------------

Increase present year....\$352,864 99

The gross revenue of August and September of last year amounted to \$897,035 32. Estimating the receipts of these months this year in round figures at one million, of the total revenue for this year will be five million three hundred thousand dollars.



## The Polytechnic College of the State of Pennsylvania.

WEST PENN. SQUARE.

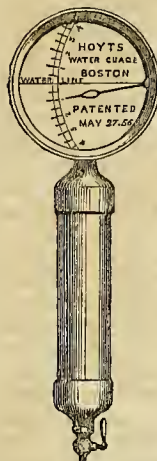
The Polytechnic College, incorporated by the Legislature, 1853, on the plan of the Industrial Colleges of Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to Dr. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia.  
Aug. 20-61.

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
jy30 No. 66 Broadway, N. Y.

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

## T. F. RANDOLPH & BRO. Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGWAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building;

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

## SAFETY & ECONOMY.

JAMES HARRISON JR.'S  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

F. W. RHINELANDER.  
JAMES A. BOORMAN. EDWIN A. POST.  
RHINELANDER, BOORMAN & CO.,

## RAILWAY AGENTS

AND  
COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

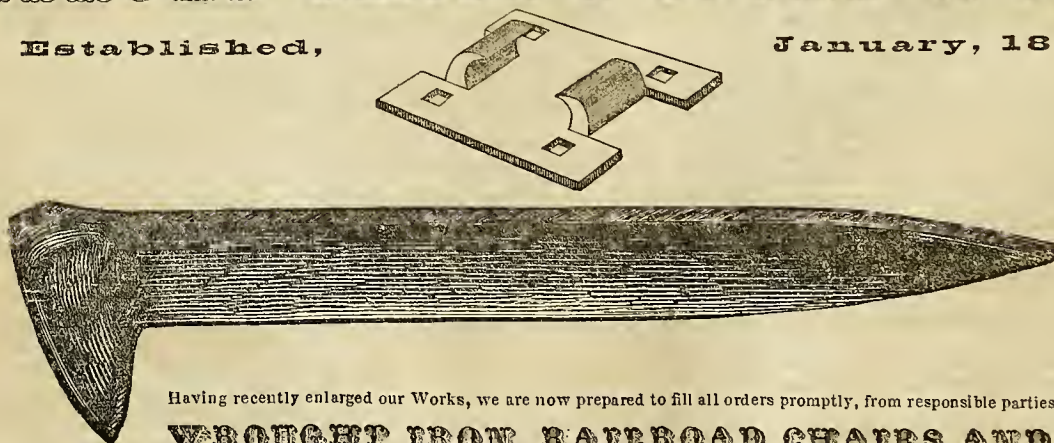
Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

## CINCINNATI WROUGHT-IRON

# RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

J. B. GREEN & BRO., Proprietors.



## Most Direct Route to the East.

### BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offer the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route.

#### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:02 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK, Sup't Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ketcher Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio  
LEE & LEAVITT.

1856. 1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.



EXCLUSIVELY AN EASTERN ROUTE.

### THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

#### TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	5½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

#### FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

**Also, Detroit, via, Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens.** Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via, Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

#### FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omni-bus L

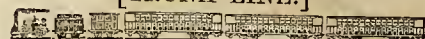
Office No. 2 Burnet House.

MONDAY, JUNE 8th, 1857.

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton & Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows: at 5:30, 7:30 and 11:15 A. M.; 2:30, 4 and 6:30 P. M., for Cleveland, Buffalo, New York, Boston, and all Eastern cities.—Also, for Richmond, Indianapolis, Terre Haute, Lafayette, Chicago, St. Louis, and Western points. Also, for Dayton, Sandusky, Toledo, Detroit, and all points North, East and West. Also, for Greenville, Union, Muncie, Winchester, Troy, Piqua and Sidney.

The 5:30 A. M. INDIANAPOLIS EXPRESS, makes connection to Terre Haute, St. Louis, Lafayette and Chicago, and all Western and Northwestern points.

NO CHANGE OF CARS AT HAMILTON.

The 7:30 A. M. MAIL TRAIN, connects at Dayton with Greenville & Miami train to Union and all points on the Bellefontaine Road; with Dayton & Michigan Road for Troy, Piqua, and Sidney; with Mad River & Lake Erie Road for Pittsburg, Fort Wayne, Toledo, Detroit, Chicago, Cleveland and the East.

The 11:15 A. M. TRAIN, FAST EXPRESS, via, Clyde through to Cleveland at 9 P. M., making close connection with

### LAKE SHORE FAST TRAIN.

Passengers leaving Cincinnati on this train will reach New York the next day at 9 P. M.

Change cars only at Clyde to an independent train which is run between Clyde and Cleveland especially for this connection.

This train stops only at Glendale, Hamilton, Middletown, Carlisle and Miamisburg, and also connects at Sandusky with

### "STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 12 hours from Cincinnati—being 13 hours shorter than by any other route.

The 2:30 P. M. Train, INDIANAPOLIS ACCOMMODATION, makes connection at Indianapolis for all points North and West.

The 4 P. M. Train, DAYTON ACCOMMODATION, connects at Dayton with train for Troy, Piqua and Sidney. Also, with train on Mad River & Lake Erie Road for Bellefontaine.

The 6:30 P. M. Train, for Dayton, makes connection at Dayton with Mad River & Lake Erie Road to Sandusky and Cleveland, and by early morning Lake Shore train for all Eastern points. Also, at Forest for Fort Wayne, arriving at 6 A. M., and Chicago at 1 P. M.

This train also connects at Hamilton for Richmond and intermediate points.

#### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

#### RETURNING TRAINS

Leave Dayton at 5 and 8 A. M. and 2:40 and 6:45 P. M. Leave Hamilton at 6:30 and 9:32 A. M., and 12:15, 3:45, 8:15 and 10:25 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.

## PERU & INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5:45 and 6:15 P. M.

Leaves Peru daily, Sundays excepted, at 6:00 A. M. for Indianapolis, connecting with all Trains for the South, East, and West.

Trains going North connect with the Toledo, Wabash, and Western Road for Lago, Huntington, Wabash, and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.

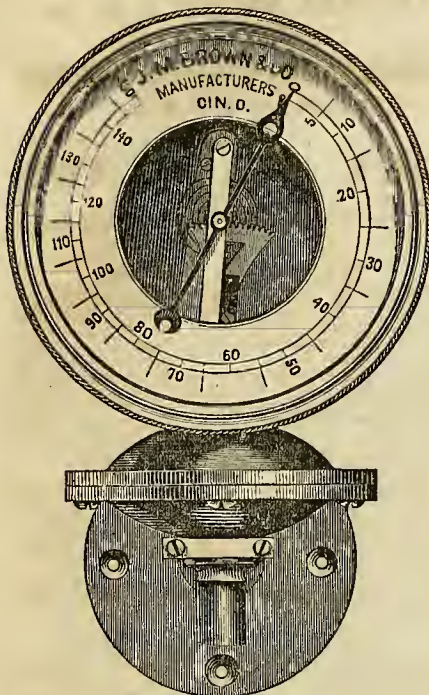
L. N. ANDREWS, Gen. Frtght. Ag't.

Indianapolis, Sept. 16, 1856. [mb29-ly.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Altoona, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

Every article necessary to  
**DRILL THE TUBE-PLATES**  
and to set the tubes in the best manner. Tube Cleaners, Steel Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Ratlings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tuyoers.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.



## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '66-2m.] J. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS. DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush.

Printed & Tinted do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width.

OR Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS:

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT.**

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation.  
sepl8 DOREMUS & NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

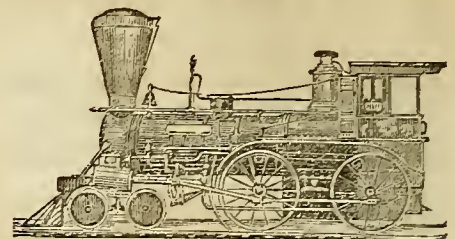
Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological maps prepared.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS.**

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**

Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Cond  
uctors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
†oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

**SUCTION & FORCE PUMP**

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

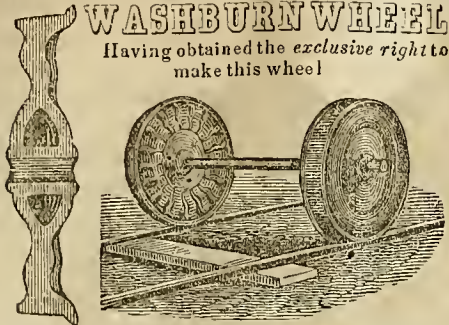
Orders thankfully received and promptly filled at the shortest notice.

**SILVER MEAL.** (The highest prize) awarded to these pumps at a Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive rights to make this wheel

In Cincinnati, Covington, and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing.

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dodgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,  
**CAR FINDINGS,**

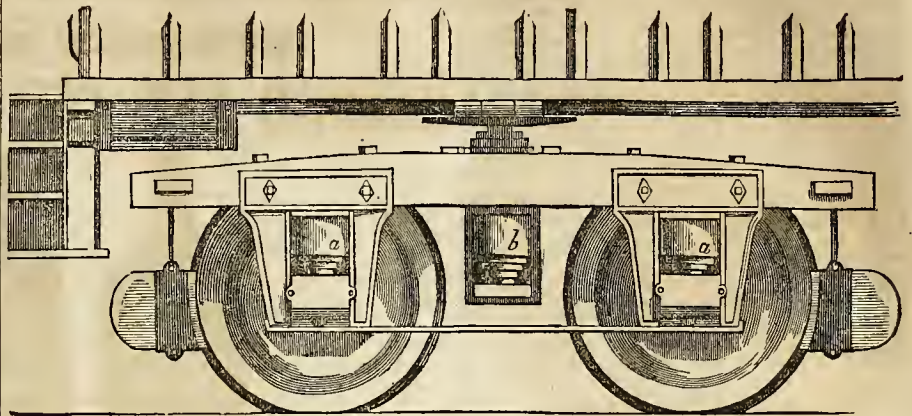
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED.

Oct 23-1y

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESDROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT... M. D. WELLMAN... C. M. RUS

### DAVENPORT, RUSSELL & CO.,

### Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* JOSEPH DAVENPORT.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.

Jan 1.

### S. C. THOMSON & CO

MANUFACTURERS OF

### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,  
1 n2J NEWARK, N. J.

### Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President,  
my 21  
Racine, May 15, 1857.

### Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cin- cinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the **Ohio and Mississippi Railroad.** Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:30 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north of Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-1y] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable to bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-tf 10 Wall st., near Broadway, New York.

**SILVER, GOLD, LEAD,**

And Other Minerals,

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUBAC, OADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes Copying.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel anything of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vietsburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in different freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

### ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

**Blank Book Manufacturers,**  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.  
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

### POOLE & HUNT, Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 298 H Street, Washington, D. C. apr12

### Thorough Bed Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

### SHORT HORN BULL, "TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cluciuoati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....AUG. 27, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS PER ANNUM, IN ADVANCE.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 27.

#### EDITORIAL.

Junction of Cincinnati Railroad,—Cincinnati and Wilmington Road.....	429
The Illinois Southern Railroad.....	429
Ohio Life Insurance and Trust Company.....	430

#### RAILROADS.

Annual Report of the Sunbury and Erie Railroad Co. for 1856.....	431
Louisville and Newport Branch R. R.....	433
Cleveland and Mahoning Railroad.....	434
Railroads Land Decision.....	434
La Crosse Railroad Extension.....	434
Rhensberg Railroad, Pa.....	434
Business of the Chicago, Iowa and Nebraska R. R.....	434
The Guadalupe Railroad.....	435
An Extensive Railroad Bargain in Progress.....	435

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	436
London Quotations.....	437
Monetary and Commercial.....	437
Sales at the New York Stock Board.....	437
Cincinnati Stock Sales.....	437

### JUNCTION OF CINCINNATI R. R.—CINCINNATI & WILMINGTON ROAD.

For the purposes of commercial utility and public convenience, the *termini* of the several railroads entering a city should be united, so as to furnish a facile connection for the transit of goods. The inhabitants of cities are apt to think that such facilities may diminish their local trade; and the city carriers of course oppose such innovations on their business. But all such objections are exceedingly short-sighted. It is found that the increase in the general mass of commerce produced by such facilities, is more beneficial than any apparent local advantage formed by obstructions. It should be the object of the mercantile community to establish a *centralization* of commerce here; and this is done not only by bringing railroads here, but by making it easier for both goods and men to pass *through* Cincinnati, than to go round it. Cincinnati has now really *eight* leading railroad lines entering the city, and constituting so many radii to all the principal points of the compass. There

are the 1. Ohio & Mississippi. 2. The Cincinnati & Indianapolis. 3. The Cincinnati, Logansport & Chicago. 4. The Cincinnati, Hamilton & Dayton. 5. The Little Miami; Columbus & Cleveland. 6. The Cincinnati, Wilmington & Zanesville. 7. The Cincinnati & Marietta. 8. The Covington & Lexington. Practically there are *five termini*. The Indianapolis & Cincinnati has its *own track*, on the route of the Mississippi. The Cincinnati & Logansport is connected with the Cincinnati, Hamilton & Dayton. The Marietta Road has a track on the Little Miami. There are yet *five termini*, viz: that of the Ohio & Mississippi; that of the Hamilton & Dayton; that of the Little Miami; that of the Covington & Lexington; and that of the Cincinnati & Wilmington, which is *not* at Cincinnati, but at *Morrow*, Warren county; the business of the road with Cincinnati being done by the Little Miami, but with no rights of track.

Looking to these facts, we find three problems of connection:

1. To connect the Covington & Lexington with Cincinnati. In the future, the Covington & Lexington is to become (extended to Knoxville) the grand artery of Southern trade, connecting this city with the five thousand miles of Southern roads. To unite it, without expensive obstructions, with the depots of the Northern roads will be a matter of great importance. Eventually, we have no doubt, this will be accomplished by a railroad bridge below Cincinnati. At present, the obstruction of the river will be much lessened by the bridge now erecting between Cincinnati and Covington. The transit of heavy goods will be much facilitated by the bridge.

2. The *Cincinnati, Wilmington & Zanesville Road* is a trunk line which ought to be of great value; but more than half its utility is destroyed for want of *termini*. Commercially speaking, it begins nowhere and goes nowhere. Other roads have command of each end, who are directly interested in taking the business from the Wilmington & Zanesville. What is to be done? At the Cincinnati end it is of the utmost importance to the value of the property on that road that there should be a *terminus*, either for the Wilmington Road, or by a contract for a separate track. This is clearly seen by the proprietors of the road, and two plans have been proposed. The first and best of these was to enter Cincinnati by the tunnel; but this involved the completion of the tunnel, and although that event at *some time* seems probable, no arrangements seem yet accomplished for that object. In the meantime, a meeting of bondholders and parties interested has been held in Cincinnati, which resulted in a new plan—to connect the Cincinnati & Wilmington with the Hamilton & Dayton Road at *Glendale*. We take it for granted that if this be done it will be done by

giving the Wilmington Road the advantage which the Marietta now has, of a separate track. The plan, as proposed, is to cross the Miami river at Morrow; thence by Deerfield to Mason, and across to Glendale. The route is an easy one. A portion of the new road will be on the track of the Cincinnati & Lebanon Road, which is partly graded, but was abandoned. A branch of about five miles will connect with Lebanon. It is supposed that the entire cost will not exceed \$600,000. The bondholders propose to take \$240,000, if the counties on the line will raise \$240,000. Other parties interested will make up the residue. We have been informed that the \$240,000 assigned to the counties can and will be raised. Certainly it is a very small sum for so important a purpose.

On the supposition that this or the tunnel plan is adopted, the problem of connecting the railroads of Cincinnati will be reduced to that of connecting three points: those of the Ohio & Mississippi, the Little Miami, and the Cincinnati, Hamilton & Dayton. Here it is obvious that unless the Western roads are connected, by an easy transit, with the great Eastern line, through Columbus, Wheeling and Marietta, there will be a failure in establishing an uninterrupted railroad commerce between the West and the East, *through* Cincinnati. It should be the object of the city, and its mercantile community, to facilitate, as nearly as possible, this railroad connection. It may be made in either of two ways: 1. It may be made by a direct railroad through Front street—and we know not why this should not be done. Street railroads are now so common in New York that their effect is perfectly well known. They certainly are not ornamental or convenient to a street of dwelling-houses; but they do not obstruct business, and in a business street they do no injury. 2. A connection may be made by a street tunnel, and perhaps, in some respects, it has the advantage. It would be out of the way of all other business, and would control its own exclusive highway. This may be made under any of the upper streets, but would probably be more easily constructed under Third street. A plan of this sort has been suggested, and we trust may be perfected. At any rate, we know that it is of the utmost importance that a *general railroad connection* should be made, and we hope that no obstructions will be offered to such a plan.

#### THE ILLINOIS SOUTHERN R. R.

This is the title of a railroad about to be constructed from Mound City, six miles from Cairo (one of the termini of the Illinois Central), to Vincennes, on the Wabash. This road is of the utmost importance to Cincinnati and to the Ohio & Mississippi Railroad; for it is the direct route to the Southwest, and the only one by which a short and most direct



outlet can be obtained to the Ohio & Mobile Railroad, and the States of Arkansas and Texas. At Mound City it will connect with the Ohio & Mobile Railroad, and by that connect directly with Mobile. At the same point it will also connect with the *Cairo & Fulton R. R.*, which passes through the center of Arkansas to Fulton, on Red River, near which it will connect with the Southern Pacific to California. In every aspect this is a most important enterprise. Looking at it as an outlet for the trade of Cincinnati, it cannot be overated. The present distance traveled by rail to reach Cairo is as follows:

	Miles.
Cincinnati to Vincennes.....	198
Vincennes to Sandoval.....	88
Sandoval to Cairo.....	118
Aggregate.....	404

The distance by the route of the Southern Illinois is:

	Miles.
Cincinnati to Vincennes.....	198
Vincennes to Cairo.....	150
Aggregate.....	348
Saving.....	56 miles.

This saving is *one-third* the distance from Vincennes to Cairo, or Mound City.

Gen. BUTLER, President of the company, says:

"The Illinois Southern Railroad Company was chartered by the General Assembly of this State on the 31st day of January, 1857, and early in the month of February following the company was organized by electing a Board of Directors, and at the same time a few friends of the railroad subscribed stock and paid the first installment, which enabled the Board of Directors to perfect their organization, establish an office, and select such other officers as were necessary.

"On the 29th of April the Board appointed Cyrus Jennings, Esq., Chief Engineer, and directed him to organize his corps, and proceed with a preliminary survey. In pursuance of which instruction the corps was organized, and started on the line on the 11th day of May, and on the 20th inst. the survey was completed, and as soon as practicable the Chief Engineer's Report will be before the public. Enough, however, is now known to the Board of Directors to assure the public that in no part of the United States has a railroad been constructed of the same length at a less expenditure than this can be."

We understand that the entire cost is estimated at something under \$20,000 per mile; which is chiefly caused by the level and easy soil through which the road passes.

The counties in Illinois are authorized to subscribe stock to this road, and the President says:

"So far as we have had an opportunity of becoming acquainted with public opinion, there is but one sentiment along the whole line in regard to county subscriptions, and we firmly believe that every county along the line will vote a subscription of \$100,000—the amount the law permits.

"With this view of our finances, we, together with many other individuals and parties interested, feel much encouraged—so much so, that every proper effort will be made

on the part of the Board of Directors, to put our finances in such a situation as to insure an early commencement of the work."

In addition to what we have said, it may be mentioned that this road passes just at the upper end of the great deposits of iron and coal in Saline and Gallatin counties. Of these we have given a full account in an article on the Saline Coal and Mining Company.

#### OHIO LIFE INSURANCE AND TRUST CO.

The public were startled on Monday last by the telegraphic news of the suspension of the New York office of this institution. The sudden bursting of a peal of thunder in a clear sky could not have been a more unexpected event than this intelligence. This institution has been for years the leading Bank at the West. Its management has been in the hands of careful, prudent, and competent men, and its business here has been of such a character as to preclude the possibility of a suspicion of its soundness and reliability. Its New York Office was generally supposed to be a mere convenience for the carrying on of its exchange business. When, therefore, the news of its suspension reached Cincinnati, it gave rise to the greatest consternation and alarm. Some doubted the truth of the dispatch; some believed there had been frauds in New York; some charged the officers there with stock speculation; others charged them with heavy and unfortunate speculations in sugar. These and a thousand other rumors equally unfounded, added to the excitement and grew with the suspense. The President of the bank, Mr. C. Stetson, a gentleman possessing of all others the confidence of the community, had been called to New York the Saturday previous, and news was expected from him with the utmost anxiety. On the opening of business on Tuesday morning, a statement was put forth by the officers of the bank that, owing to the unexpected news of the suspension of the New York office, the Banking House here would be closed, but that the officers had the highest confidence in the resources of the bank to meet all its liabilities, and leave still a surplus. During the course of the day, dispatches were received from New York, stating that the Tribune surmised the liabilities of the New York Office to be between five and seven million dollars. The failure of several other establishments in New York was announced. This added to the excitement, and the depositors were now thoroughly alarmed. Those who had expressed the greatest confidence found themselves unable to sustain it against the seeming mass of testimony.

The action of the officers of the bank was, however, prompt and decisive. They announced that they would receive checks on the deposits in payment of discounted notes and mortgages matured and maturing. And that all collection notes would be returned to

the holders. Part of Tuesday and the whole of Wednesday were thus employed in cancelling liabilities. This morning the official statement of the Bank was published as follows:

#### Official Statement of the Principal Office of the Ohio Life Insurance and Trust Company.

CINCINNATI, Aug. 26, 1857.—Evening.

Being as yet without any explanation of the condition of the Agency of the Company in New York, from any reliable source in that city, the Trustees in Cincinnati deem it due to the public to make the following statement of the affairs of the principal office. This statement the Trustees regard as entirely reliable, and a fair and just estimate of the means of the Company here.

#### STATEMENT.

##### MEANS.

Loans, Trust Department.....	\$2,296,102 47
Banking Department.....	1,238,996 23
Real Estate.....	243,605 20
Nom. Val. Cash Val.	
County and City Bonds..	\$121,150 \$101,935
Cin. Ham. and Dayton Railroad Bonds.....	200,000 164,000
Real Estate Junct. Bonds	125,000 125,000
Other Railroad Bonds....	110,500 52,524
Cin. Ham. and Dayton Railroad Stock.....	31,500 20,475
Other Reliable Stocks....	21,900 21,900
Due from other Banks....	152,196 42
Cash on hand.....	249,792 00
	\$5,278,527 38

##### LIABILITIES.

Circulation.....	4,040
Deposits — Banking Department.....	1,191,093
Trust Department.....	798,468
Due to New York Agency	652,895
Due to other Banks.....	192,515
Dividends unpaid.....	94,296
	2,933,842 00

Excess of means over liabilities (ex. of cap.)..... \$2,344,685 38

By order of the Board of Trustees,  
A. P. BISHOP, Asst. Cashier.

It would thus appear that the bank here has assets to the amount of \$2,344,685 38, exclusive of its capital, over and above its liabilities. The troubles are therefore wholly in the east and have arisen solely from the management of its eastern officers. The following is the card of the President as published in the papers soon after his arrival:

OFFICE OF THE OHIO LIFE INS. AND TRUST CO.,  
NEW YORK, August 24, 1857.

The unpleasant duty has devolved upon me to state that this Company has suspended payment. This event has mainly been brought about in consequence of making loans here to parties who are unable to respond at this time. I would add, that the capital of the Company—two millions—is sound and reliable, exclusive of such loss as may arise from insufficiency of securities pledged for loans above referred to.

C. STETSON, President.

Yesterday a dispatch was received from Mr. Stetson, asking the directors to send on securities. This looks as though Mr. Stetson felt that he had reached the bottom and would be able to go through. We sincerely hope that such is the case and that this institution will be able to weather the storm so suddenly blown up. No greater calamity could happen to this whole West than the failure of this bank.

It will, however, under the most favorable circumstances take time and some salutary changes to restore, even in a measure, the confidence heretofore unsuspectingly reposed in this institution. We believe that the New York branch must in any event be dispensed with, and the operations of the company confined to its legitimate sphere.



## Railroads.

### ANNUAL REPORT OF THE SUNBURY & ERIE R. R. CO. FOR 1856.

To the Stockholders of the Sunbury & Erie Railroad:

The period has arrived when, under the provisions of the charter, the Board of Managers are called upon to give an account of their stewardship, and to surrender the trust confided to them into the hands of the company.

It is now nearly a year since the present managers were entrusted with the affairs of the Sunbury & Erie Railroad. That more has not been accomplished in that time is a disappointment to many, but to none more so than to the members of the Board, who had reason to hope that by this time a brighter horizon would have presented itself.

A clear statement of the condition of the company at the time they took charge of its interests, and the policy by which they have been governed, will, it is hoped, render their apparent inaction satisfactory to all parties.

With the past history of the company the Board have no concern further than to remark that it is the history of hopeful and energetic men, struggling to construct a gigantic work with inadequate means.

It is but justice to our predecessors to say that on reference to the contracts for construction, and the expenditures of the funds of the corporation, they appear to have executed their trust with an eye solely to the interests and advantage of the company, and to have conducted its affairs with as much economy as could be expected under the circumstances in which they were placed.

But we have now to consider the present and future, not the past.

When the Board assumed their task they found forty miles of as good a road as the country can now produce, extending from Sunbury to Williamsport, in running order, and worked on shares by three other parties; this company having, as yet, provided no rolling stock.

They found contracts had been made, payable partly in cash and partly in stock, with two companies of contractors, for grading and bridging the whole line from Williamsport to Ridgway, about one hundred and twenty-five miles, with the exception of some six miles near Williamsport, and the contractors at work on the more expensive sections, over a space of about forty miles, on which a large part of the grading has been completed.

They found about eighty-two miles at the western end, extending from the harbor at the city of Erie to the margin of the great bituminous coalfield, under contract with two companies, payable three-fourths in the municipal subscriptions from that region and the bonds of the company, leaving one-fourth only of the estimates to be paid for in money, on which, however, no expenditures had been made.

The resources of the company were, from unpaid installments and bonds received in payment for installments, from which it was believed that about twelve hundred thousand dollars would be realized, of which the existing obligations of the company would require between seven and eight hundred thousand dollars for their liquidation, leaving something over four hundred thousand dollars as a working capital, which, it was foreseen, could not avoid being, in a great degree, absorbed by

the payment of interest and expenses, and by the cost of those sections of the road which were in the hands of sub-contractors, and which could not be stopped without this company being subjected to claims for damages which might in the end have cost more than to complete them.

This was the pecuniary condition of the company, except that a debt for which bonds had been issued to the amount of \$326,000, and the only debt of the company uncovered by its accruing assets, matured in October, 1856, and has not yet been adjusted.

The policy best to be pursued for the eventual success of the enterprise became, as soon as its position was fully ascertained, a question of anxious solicitude.

There were points on the line of the road, viz: Farrandsville on the east, and the margin of the coalfields on the west, to which, it was believed, that ample trade for support and profit could be realized, whenever a finished road reached them and was fully equipped, even if the main object of a through line was postponed. To build the road to these points was deemed of the last importance to the well being of the whole undertaking; but the condition of the treasury and the stringent state of the money market forbade the attempt at this end of the route.

The large amount already expended west of Williamsport was a strong inducement for immediate exertion to finish this part of the line. Had it required only the funds necessary to lay the rails, this might have been done; but a considerable amount of grading and bridging was still to be done, and the trade would have required so large a stock of machinery for its development that the total amount would have been greater than the credit of the company could have commanded without a ruinous sacrifice, except from parties who had already a deep interest at stake.

The only source to which the Board could look for aid to a sufficient extent, and for a period long enough to have developed this trade, was applied to without success.

Hence they have been obliged to confine themselves to such expenditures as were necessary to preserve the property and save the company from charges outside of their legitimate expenditure. Any other course would have involved the company to an extent that would have seriously damaged the prospects of the work, and in the end have impeded its progress, if not have stopped it entirely.

On the western end of the road a different case was presented. An extensive interest on the lakes and in the interior was to be benefitted, and an important trade to be created, which was sure to react favorably on the whole enterprise. Three-fourths of the funds required to prepare the whole eighty-two miles of road for the iron was provided, while only one-fourth had to be raised in cash, and of this amount the Board was relieved of one-half by a sufficient guarantee that it should be raised along the line of the road, leaving but about two hundred thousand dollars to be taken from the general funds of the company. Well knowing that there were ample interests to be benefitted by the completion of this section, the parties concerned in which would at the proper time feel it to their advantage to come forward with subscriptions, the Board determined to incur the risk and go on with the work, and have had no reason to regret their decision.

But the future of this work is a more interesting question.

When the present Board took charge of the company's affairs the then state of public opinion forbade any hope of progress with so large a work upon individual subscriptions. Whether new interests may not evolve to make a change in this respect cannot be now foretold. That there are interests growing to which this railroad is essential cannot be doubted, but how soon they may be strong enough for the object of its completion, if ever, it is difficult to say.

If the work had been made more nearly to completion, it might have been *financiered* to the end; but the amount of interest now invested in it is not sufficient, even by its total sacrifice, to effect that object; nor will the present Board consent to become the agents for such a mode of operating; they are willing to protect and secure, but not to sacrifice the interests confided to them.

Fully convinced that the Sunbury & Erie Railroad was a vital necessity to the trade of the city of Philadelphia, as well as to the full development of the resources of the State, and that if laid down at its legitimate cost, without recourse to pecuniary sacrifices, it would be a full paying investment, the Board chose to wait the turn of events, rather than initiate spasmodic and inadequate efforts to force it forward. They felt satisfied that some more extended basis than could be obtained from private sources, was necessary, before they could with any hope of success apply to the public at large.

The great impediment to private aid, at this time, is the uncertainty of final success, without resort to those financial expedients which so often sacrifice the interest of the original promoters of important enterprises; and hence it is plain that, in the absence of public confidence in ultimate success, we could not hope to secure the public sympathy.

To place the company in a position to ensure this success, the State of Pennsylvania and the city of Philadelphia were both looked to.

Application was made to the Legislature for aid, through the sale of the public works, but the plan was presented too late in the session for its full consideration.

The application was made in full view of the true interests of the Commonwealth.

The public works were constructed for the development of the internal resources of the State; and though partial, of necessity from their geographical features, they have fulfilled their mission to the greatest possible extent. They never will or can be an investment for direct profit to the Commonwealth; and the voice of the people has for years demanded their sale.

They have been partial in their results, because of their necessary locations; but all parts of the State have been taxed to pay the interest on their cost.

If funds are realized from the sale of these works, it is but simple justice that they should be devoted for a time to the advancement of portions of the State which have for a quarter of a century been taxed for their support, while receiving no direct or indirect advantage therefrom.

The justice of this claim has never been denied, and it is clear that the investment will have the double advantage of being secure in its returns, and by enhancing the value of the country through which the new works pass, add largely to the taxable valuation and revenue of the State.

The application, as made last year, will not



be renewed, but it is hoped that the General Assembly will, at their present session, take some effective steps to place the Sunbury & Erie Road on such a firm basis as will insure its speedy and successful completion.

The application to the City Councils was based on different, though equally cogent grounds. Apart from the fact that the city has already invested two and a quarter millions in the enterprise, which, in true wisdom, should be protected if possible, it has, in its advantageous locality for a greatly increased internal trade, and the consequent prosperity of its manufactures and commerce, a deep interest at stake. The trade of the Northwestern Lakes is a prize of vast value, now wholly monopolized by our more enterprising rivals for want of an outlet reaching directly to our own market.

The question of further aid to finish this work is now undergoing a careful investigation by an intelligent committee, who will doubtless advise what course the Councils should pursue in relation to it.

When the result of the deliberations of the General Assembly and of Councils is known, the line of policy then proposed by the Board will be submitted to you.

That the Sunbury & Erie Railroad will be a profitable work, no man who takes the trouble to investigate its circumstances can doubt. Every day adds to our conviction as to its advantages in this respect. The fertile character of the country through which, for a large part of the way, it passes; the vast forests and rich minerals of the central part of the route, which will find an inexhaustible market to the East and the West; and the constantly increasing trade from the Lakes, will insure a lucrative business, which will be largely increased by its important railroad connections with the great West.

It is true that the commerce of the Lakes is suspended by ice for a large portion of the year, but that will not interfere with the traffic on our road. The avenues which now bring that trade to the seaboard are inadequate for the purpose, and at this moment the road, if finished, would have as much freight as it could move, taking only that which is rejected by existing railroads. That this is true, is evidenced by the fact that more than half the freight now offering at Cleveland and west of that place is daily refused, from the impossibility of moving it from Dunkirk and Buffalo towards the Eastern markets.

We are fully satisfied that if the Sunbury & Erie Railroad is built upon legitimate means, and without any extraordinary financial sacrifice, it will yield a revenue ample enough to satisfy the most sanguine stockholder.

#### ROUTE.

The final general location of the route of the Sunbury & Erie Railroad has been made upon engineering data furnished by the surveys of Mr. Edward Miller, and the reviews by the present Chief Engineer of the company, Mr. Robert Faries.

The Eastern end of the line is so marked by nature that no choice was left, and the road lies by the waters of the West Branch of the Susquehanna and its tributary, the Sinnemahoning.

On the Western end more latitude of choice was allowed, especially for the first thirty miles from Erie. Two routes had been projected, each having strong advocates in its favor—one by the village of Wattsburg and

the other by Waterford. The former had a maximum grade of 52.8-10 feet per mile for 17½ miles of its distance; the latter one of 80 feet for about 10 miles. A new access to the harbor, having a 70 feet grade for 8½ miles, having been recently explored by the engineers, falling into the old route by Waterford.

The comparison of the advantages of the two routes being now in favor of that by Waterford, on the line of the new survey, it was adopted. The fact that by this route an immediate saving was effected in the cost of construction of one hundred and fifty thousand dollars, and an eventual saving of three hundred thousand more before the road could be considered a permanent work, had a strong bearing upon the decision; besides which, the line adopted drains a more extensive country of its trade and travel, and hence is of greater commercial value to the company.

The Central Division, through Elk county, presents many considerations which are to be taken into account, because there are vast local interests to be consulted, as upon them the road will lean very largely for its profitable results, and hence the decisions became involved in some difficulty.

The general route having been adopted by this Board, it is proper that the stockholders should fully understand the grounds of their decision. The country itself is very difficult to pass, and has occupied the engineers in its investigation in every stage of the history of the road, so that it may now be considered as well understood. The southern part of McKean county is formed by a ridge or watershed, in which rise the streams flowing northward and southward, and which extends east and west nearly through the whole length of the county.

A similar ridge, but more abrupt on its eastern slope, runs in a north and south direction through Elk county, dividing the waters running east and west.

The route formerly recommended by Mr. Miller, after many ineffectual efforts to force these ridges by any judicious line, was up the Driftwood branch of the Sinnemahoning to Emporium, thence westward, tending southwardly to St. Mary's, thence to a point near Ridgway, and up the Clarion river to the head waters of the Tionesta.

The route proposed by Mr. Faries follows the Bennett's branch of the Sinnemahoning to Winslow, thence up Trout run, and across the country by St. Mary's to Ridgway, and up Mill creek, falling into Mr. Miller's route on the Tionesta. This route saves seven miles in the distance between the mouth of the Driftwood and St. Mary's, while it encounters a heavier expense in tunneling. Without any estimate in detail of the Driftwood route, it is believed that its cost will about equal that by Trout run, the increased distance balancing the expense of the tunneling; and it is expected that some modifications may be made to reduce the cost of the adopted line.

Winslow and Ridgway being made points, the selection between the Clarion River and Mill Creek may still be considered unsettled, and subject to future examination, which may on comparison induce the adoption of Mr. Miller's route up the Clarion.

Since the action of the Board on this subject it has been suggested that a more Northern route can be found which might be made advantageous in an engineering point of view. This is very possible, and if the engineering qualities of the route only are to be taken into account, it might be worth while to suspend the location for the purpose of making

still more thorough examinations. There are, however, other considerations which must govern in the location of so important a road.

Taken as a local question only, that is, the special benefit to the country through which it passes, the Board believe they have secured the greatest advantage to the largest section by their present choice. The line runs nearly through the centre of Elk county, its whole length about equi-distant from McKean on the North, and Clearfield and Jefferson on the South. Territorially, therefore, the location seems to be fair. Commercially, it has access to a greater scope of country than a Northern route would afford. The Southern route is at the foot, a Northern one would be at the head of the streams; and trade naturally flows down the streams, and not up them.

By this law, the Northern part of McKean County will drain to the New York improvements even if the Sunbury and Erie Road should pass along the ridge; and the trade of Elk County would be forced to come up hill, or seek other channels, whereas by the present location, the trade would descend by lateral branches to our road.

It is the view of the Board, therefore, that a more Northern location would be advantageous only to the lands through which it passed, while it would seriously affect the interests of the country on each side, and of course the commercial value of the road itself. Socially, therefore, the Board are satisfied that they have met the true interests both of the country and the corporation.

But this cannot be considered either as a local or engineering question merely.

The effect of the location upon the interests of the stockholders and upon the trade of the city of Philadelphia is too important to be overlooked, and must enter largely into the question.

The terminus of the Allegheny Valley Railroad will probably be at Winslow or Ridgway.

It is true that the advantages of this connexion may be considered as only incidental, but as it places this vast mineral region in communication with so important a market as Pittsburg, it is sound policy to treat it as an important element in deciding the route.

The great point to be looked at in this connexion, is the Internal Western trade.

If the line adopted is adhered to, the Sunbury and Erie becomes a link in a great chain of the railways, forming a trunk line from Philadelphia to Council Bluffs, on the Missouri river, and probably to much more distant points, with extensive lateral connexions on either side.

Commencing at Ridgway, already a series of Companies are at work on their respective links of this great line, except on the Venango road, and so much work is already done as to afford the assurance that the whole line will be finished by the time this company can reach the connecting point at Ridgway.

The movements of this company are looked to with great interest by all parties connected with this extensive line, and no doubt exists, that so soon as the completion of our road is rendered certain, means will not be wanting to construct a line which will throw an enormous business into Philadelphia.

Having selected the line of road with a view not only to its local advantages and its length, but also its great through connexions, the Board would deem any change detrimental to the interests of the Company and of the State.

The financial condition of the Company as shown by the Treasurer's account, up to and



including the 1st of January, 1857, is as follows, viz:

Receipts from instalments on subscriptions paid in—	
By the City of Philadelphia .....	\$2 000,000
“ Dist. of Richmond .....	250,000
“ City of Erie .....	1,276,030
Other Stockholders .....	150,000
	\$3,676,030 00
From 7 per ct. bonds of the Company issued .....	331,000 00
From temporary loans .....	542,560 05
From balance of old assets of Com'py .....	1,738 38
Total .....	\$4,551,328 43

Expenditures for buildings, land, right of way and engineering over the whole line .....	\$312,227 95
For road construction and superstructure from Sunbury to Williamsport, (40 miles) now in working order .....	\$1,937,305 72
For road construction and superstructure West of Williamsport .....	789,721 86
For road construction and superstructure East from Erie .....	19,690 90
For piers at Harbor of Erie .....	68,001 37

Total expended in construction .....	2,834,720 86
For incidental expenses .....	87,244 69
Total expenses on the work .....	3,234,293 49
To which is to be added the discount paid on the various bonds received for instalments, to wit:	
On City of Philadelphia loans .....	42,405 63
On Dist. of Richmond do .....	10,911 77
On city of Erie, do .....	280 00
On Cleveland, Painesville and Ashtabula Railroad bonds .....	37,471 17
	91,068 57

Interest paid to the city of Philadelphia .....	153,116 67
Paid other stockholders .....	79,253 31
“ on temporary loans .....	140,901 46
“ on Company's bonds .....	\$90,360 00
	393,636 44

From which, deduct earnings of the road .....	77,105 03
Less maintenance of way .....	24,400 76
	52,704 27

Total interest .....	340,932 17
To interest and discount .....	432,000 74

Total expenditures .....	3,666,294 23
Balance of assets in hand—bills receivable and items due Company .....	80,973 06
City of Philadelphia loans .....	543,600 00
City of Erie bonds .....	99,000 00
Cleveland, Painesville and Ashtabula Railroad bonds .....	147,000 00
Telegraph stock .....	2,000 00
Cash .....	12,461 14
	\$85,034 20

Total .....

Of this balance, the Erie City Bonds are especially appropriated to the Western Division of the Road, which leaves the amount of general assets \$786,034 20, which, with all the reductions that may be required to convert them into cash, is ample to provide for the floating debt of the Company.

In addition we may safely count on \$250,000 to \$300,000 from unpaid instalments on private subscriptions, which can be made available whenever the operations of the Company shall be vigorously resumed and the work in fair progress.

The funds on which the Board rely to construct the Western division, consist of

Erie City bonds, as above .....	\$90,000 00
do do to be yet issued .....	350,000 00
Erie County bonds .....	200,000 00
Warren County and Borough bonds .....	180,000 00
Guaranteed private subscriptions (West) .....	200,000 00
Amount paid on the work, say .....	20,000 00

\$1,049,000 00

Which, with Bonds of the Company, and the additional subscriptions assumed by the Board will be sufficient to pay the cost of preparing this Division of the road for the iron, and laying the same. The iron can then doubtless be procured upon the credit of the work done.

The foregoing presents an accurate view of the financial position of the Company.

The amount expended has not finished so much of the road as it ought to have done.

The fault of this does not lie with the management of the road, present or former, but with the circumstances in which they have been placed.

If the instalments had been promptly paid, the road would now have been finished and in profitable operation to Lock Haven, and probably to Farrandsville. We have no reason to believe that any of the Company's money has been misspent; and although contracts with cash in hand could no doubt have been made at cheaper rates, yet under the circumstances of the case, our predecessors acted with judgment, and forced the work through difficulties that few can appreciate.

With a full comprehension of these difficulties, the present Board cannot consent to be placed in a similar predicament. The road can be built to pay a large return to the stockholders, develop a country of untold riches, and add immeasurably to the prosperity and wealth of the city and of the State, if built with the command of adequate means; but we are not willing to undertake the thankless task of *financiering* through, without regard to cost, to the injury or sacrifice of every interest now invested.

There are three parties deeply interested in the success of this enterprise, and on whom should devolve the cost of completing it. The State of Pennsylvania, the City of Philadelphia, and the public at large.

If either of these parties should move with force, there is no reasonable doubt the others will follow.

The whole cost of the work is estimated at from eleven to twelve millions of dollars. Of this sum about five millions are provided. Additional subscriptions to the amount of six millions of dollars would put the road through with but little debt. Are the respective parties able and willing to meet their several shares of this amount?

If they are, the road may be finished and its benefits developed within three years from this date.

It is proper that the Board should allude to the encouraging aspect of the business of the finished portion of the work, although from many circumstances the trade is only in its infancy.

The road is now worked by other companies on shares, as this company owns as yet no rolling stock.

The gross income for 1855 was	\$49,860 10
Deduct one half for working ..	24,930 05
Maintenance of way .....	12,868 23

Net earnings for 1853 .....

Gross income for 1855 .....	103,800 66
Deduct for working .....	52,930 23
Maintenance of way .....	12,430 33

Net income for 1856 .....

The Board have every reason to believe that the net earnings for 1857 will be at least double those of the past year, for the same extent of road.

In conclusion, the Board will call attention to frequent annoying misunderstandings in the public prints. In consequence of the resemblance of our corporate title to that of another railroad company. They would therefore suggest that application be made to the Legislature to change the corporate name of this company to the Philadelphia and Lake Erie Railroad Company, or some other that may more properly express than the present name the extent and importance of our great enterprise.

All of which is respectfully submitted.

By order of the Board of Managers,  
S. V. MERRICK, President.

After the reading of the Report, the following resolutions were offered by Mr. Struthers: *Resolved*, That the Report of the Board of Managers, as read, be adopted, and referred to the new Board for publication.

*Resolved*, That the policy indicated by the Board in their report be approved by the stockholders.

*Resolved*, That application be made to the Legislature for a change of the corporate name as suggested by the Board.

*Resolved*, That if the State of Pennsylvania and City of Philadelphia, shall extend to the Company the aid asked for, the stockholders will sustain the Board in their efforts to bring this work to a speedy and successful accomplishment.

On motion, the resolutions were unanimously adopted, after which, the meeting took a recess until 3 o'clock, to go into an election for a new Board of Managers. Ex-Senator James W. Quiggle and John F. Goodwin were appointed tellers. The following ticket was elected, there being no opposition:

Managers—Samuel V. Merrick, John B. Myers, John C. Cresson, Samuel Welsh, Mordecai L. Dawson, Francis R. Cope, Wister Morris, Henry M. Phillips, Frederick Fraley Chas B. Wright.

City Directors—Jas. D. Witham, Harry Connelly, Thos. L. Kane.

#### LOUISVILLE & NEWPORT BRANCH R. R.

Pursuant to previous notice, the citizens of Henry, Owen and Gallatin counties Kentucky, deeply interested in and desirous of the construction of a railroad from Louisville to Newport or Covington, under the name of the "Louisville & Newport Branch Railroad," assembled in mass meeting at Drennon Springs, on the 6th inst., and, on motion of General George D. Dicken, Hon. E. F. Nuttall was called to the chair, and H. Skinner appointed Secretary. Whereupon, on motion, the following gentlemen were appointed a committee to draft resolutions expressive of the sense of the meeting in relation to the construction of said road, viz: General G. D. Dicken and W. W. Wright, of Henry, and T. C. Ross, J. P. Orr and G. Garnett, of Owen, and G. W. Sanders, of Gallatin county. The Committee through their Chairman, W. W. Wright, reported the following resolutions, which were unanimously adopted:

WHEREAS, The commencement of the work on the Louisville & Newport Branch Railroad has, for various reasons, been delayed—reasons, however, not founded in any impracticability of the route, expensiveness of construction, probable smallness of dividends by the road, want of friends, &c., but rather from the various opposition of sleepless enemies, whose levity of zeal, constancy of purpose, and fertility of stratagem, has been somewhat remarkable, but which, instead of discouraging, have only tended to strengthen and confirm our confidence and conviction in the merits of our cause, and serve as a presage of ultimate success; and since these, with other reasons—in the estimation of your committee entirely sufficient to account for the delay thus sustained in our work—no longer operate as a barrier; therefore, be it

*Resolved*, That we consider the prospects of the road at this moment better than they have ever been.

*Resolved*, That a committee be appointed to visit Louisville, Covington, Newport and Cincinnati, to confer with the Louisville & Frankfort, the Covington & Lexington Railroad Companies, and any other corporations which, in their judgment, may be interested, to see what can be done in furtherance of the enterprise. That said committee be empowered to solicit stock.

*Resolved*, That the following gentlemen be appointed said committee, viz: G. D. Dicken and W. W. Wright, Henry county; G. Garnett, of Owen; Lewis Collins, of Kenton; George W. Anderson, of Boone; Dr. C. B. Chambers, of Gallatin; and L. F. Sanders, of Carroll; with power to appoint alternatives in case they cannot attend.

*Resolved*, That so soon as the capital stock of \$1,000,000 be secured the work shall be begun.

*Resolved*, That a mass meeting and barbecue be held at Sparta, Owen county, on Thursday, September 24.



Resolved, That a full report of this meeting be forwarded to the daily and weekly papers of Cincinnati, Covington, Newport, Louisville and Frankfort for publication.

The meeting was largely attended, the very best spirit prevailed, and a warm spirit most clearly exhibited in the subject it had under consideration. The Hon. E. F. Nuttall being called upon made a short speech in his usual warm, lucid, terse and convincing style.—Next came General George D. Dicken, armed at all points with stubborn facts and irrefutable arguments in support of this enterprise, to which he has devoted a large amount of means and years of unwearied toil and ceaseless exertions, and in a smooth but rapid manner tore down the last objections to it, as though they were gossamer threads, with the consummate art and practised skill of a polished veteran logician. Then came J. C. Ross, who, in a few plain, sensible remarks, and in an easy, yet strong manner, unfolded the advantages which the construction of the road proposed would confer upon the people within the sphere of its influence, and concluded by giving a cheering account of Owen. Lastly came G. W. Sanders, who gave a cheering recital of the interest being taken by the people of Gallatin, along the line, in this project.

On motion, this meeting adjourned to meet at Sparta, Owen county, Kentucky, on September 24. E. F. NUTTALL,  
Chairman.

#### CLEVELAND & MAHONING R. R.

July earnings, 1857.....\$34,894 49  
July earnings, 1856.....4,952 73

Increase (over 600 per cent.).....\$29,941 73

In July, 1857, sixty-five miles were in operation; in July, 1856, fifty-three miles were in operation.

In July, 1856, the mileage of trains was 2,682 miles, and the average earnings per mile, \$1 73.

In July, 1857, the mileage of trains was 13,468 miles, and the average earnings per mile, \$2 59.

Persons who invested in the Cleveland & Mahoning Railroad before trains ran over any part of it, and when it was an *experiment*, may very properly be congratulated on their foresight and discrimination, in this time of revenue evidences of its demonstrative success. And in the fact that the Cleveland & Mahoning Railroad, which is still unfinished and without outlet from its eastern end, is operated with profit to its owners, there is encouragement for that most useful class made up of men of enterprise and means, who believe that new railroads that occupy good ground and supply a commercial necessity, or in other words a public want, may be so operated as to develop trade and earn dividends payable to *original subscribers*.

In the same fact there is also a reproach and a rebuke to that class who, seeking to palliate the consequences of their own official or professional acts, put forward the groundless plea that *original contributors* to a new enterprise should not expect (what the same men had, doubtless, at an earlier date promised) dividends on their outlay, but should, on the contrary, regard the public as their representatives, and in the good performed for the public by the road, find their reimbursement and consolation. Whereas the aim of the officers and employees of every grade in and about a railroad corporation should be, in the first place, the building of a new road for a sum that will at least bear a comparison

with the original estimates of cost, and, in the second place, the cultivation of traffic over the road when completed, with a view to the accommodation of the public and the interest of its owners.

The efficient management that distinguishes the Cleveland & Mahoning Railroad commends it to confidence, in the interior and at the seaboard; and confidence will be awarded to it as its revenue condition and its revenue prospects become current topics of railroad information among the many who invest in personal property, and who, from a common fund of experience, are drawing lessons of discrimination that will, ere long, enable the wiser of them to sift chaff shares from wheat shares, turning the first adrift upon the wind, and appropriating the latter to the purposes of income.—*U. S. Railroad and Mining Register*.

**RAILROAD LANDS DECISION.**—In reply to a letter from a southwestern (Land Office) Register, asking for information concerning pre-emption on lands withdrawn from market for railroad purposes, in view of the provisions of the Act of June 3, 1856, the Commissioner of the Land Office has decided:

1. That where the settlement was made with good faith before the passage of the law, and all the requirements of the Act of 1841 have been met by the party claiming, he was entitled to file, subsequently to the passage of the law, his declaration statement and prove it up as well on the odd-numbered sections as on the even.

2. That by the Act of 3d of March, 1853, (chapter 147,) settlements with a view to the pre-emption are authorized upon the alternate reserved sections at any time after withdrawal and prior to the final allotment by the General Land Office.

The following circular has been issued by the Commissioner of the General Land Office:

GENERAL LAND OFFICE,  
June 22, 1857. }

To the Register or Receiver at ———, Minnesota:

SIR: I am directed by the Secretary of the Interior to instruct you not to allow any pre-emption claim predicated upon a settlement made within four months after the receipt of this letter, on any of the lands withdrawn from market, in view of the provisions of the law of 3d March last, making a grant of land to the Territory of Minnesota for railroad purposes. Acknowledge the receipt of this letter. Respectfully,

T. A. HENDRICKS, Commis'r.

#### LA CROSSE RAILROAD EXTENSION.

The track of the La Crosse and Milwaukee Railroad is now laid to a point about 9 miles from this city westward, where a stretch of some 2½ miles of low land temporarily checks the *rapid* progress that has hitherto marked the work but which will be overcome in a few days, as it only needs a top—dressing of sand to fit it for the track. Over 4,000 feet of track were laid on Monday, and the whole 9 miles have been laid in 19 days. The road is nearly an air-line to Kilbourn City, only three or four slight curves intervening.

On Tuesday afternoon through the politeness of the gentlemanly contractors, in company with several of our citizens, we seated ourselves on a pile of rails on the construction train, and passed over the route to its present terminus, and its was the opinion of

all that it was smoothest and most complete track, for a new one, in the western country. We understand that it is the intention of the contractors to push the road on from Kilbourn City to New Lisbon, Juneau county, 50 miles beyond this city and about 50 miles from La Crosse, as fast as possible, and that they have ample means to do it before the ground freezes. We also understand that the grading of the route through to the La Crosse valley, will be completed this Fall, with the exception of the tunnel at the dividing ridge which will be finished by spring. This tunnel is to be 1400 feet long, some 200 below the surface, through solid rock that need no arching, and, when completed, will be a work of greater magnitude than any other on the entire route of the road. The energy which the contractors have exhibited heretofore under the discouragement of an unusually severe winter, is a guaranty that this important road will not drag on their hands. It will be so far completed by December or January, as to become the thoroughfare for the trade and travel of Northern Wisconsin and Minnesota, after the close of navigation on the Mississippi.—*Badger State*.

#### EBENSBURG R. R., PA.

The Pennsylvanian says: "The citizens of Ebensburg are very earnestly urging the construction of a railroad from Ebensburg to the Cresson station, on the Pennsylvania Railroad, a distance of nine miles, and a committee appointed at a recent meeting have published an interesting report demonstrating not only the practicability but the great advantage of the enterprise. The route is peculiarly favorable, there being no stream of any importance to cross, while the grades need not exceed 45 feet per mile, and this for only two miles of the route, the balance varying from a level to 25 feet per mile; and, on no portion of the road would deep excavation or heavy filling be required. The present trade of Ebensburg on the Pennsylvania Railroad, is ascertained to be 5,568 tons, yielding \$3,340; the travel between Ebensburg and Cresson for the last year is put down at 14,000 passengers, which at 40 cents would be \$5000. These, it is estimated, with the opening of this branch road, would be increased to \$11,740 together. The estimated cost of the road is as follows:

Nine miles of grading, at an average of \$6000 per mile.....	\$54,000
Nine miles of ballast at \$800 per mile.....	7,200
Nine miles of cross ties, at \$2,200 per mile.....	6,000
Iron for nine miles of track.....	57,520
Track laying and back ballasting.....	4,500
Engineering, &c.....	2,000

Making a total of.....	\$131,220
At 8 per cent.....	\$10,497 60
which, deducted from.....	21,740 80

Leaves a balance of.....\$11,243 20

to be applied to the running expenses and repairs of the road. In explanation of their estimates of the increase of trade, the committee say:—

In making our report of the estimated increase, your committee have taken into consideration the fact, that were a railroad made from this point to Cresson, an outlet would be given to an immense quantity of lumber from the Cherry Tree region, which is now dependent for a market entirely on the uncertain floods of the Susquehanna. That lumber is now forced into market in large quantities, and the sale of it is effected at ruinous prices. Indeed, so uncertain is everything connected with the sale of sawed lumber in that region



that there is not the one-fourth the amount manufactured that would be, under the certain facilities a railroad would afford. We have now a plank road completed to that point, (with the exception of only six miles) and an extensive lumberman from that portion of the county informed one of your committee that he, himself, would transport *one million of feet by this route* were the railroad completed.—Moreover, your committee have now the names of over 50 persons owning sawmills, who could ship their lumber advantageously from this point. Were they to manufacture but 100,000 feet each in a season, it would reach the large aggregate of 5,000,000 feet to be transported over the Pennsylvania Railroad, *which now finds another route, or is not brought into market at all.* This increase, it will be observed, would not benefit the branch alone, but the whole of it would be a clear increase of the business of the Pennsylvania Railroad, *for not one foot of it now passes over that road.*

**BUSINESS OF THE CHICAGO, IOWA AND NEBRASKA R. R.**—For the purpose of showing the actual business of the C., I. & N. R. R., we have taken some pains to procure the statement from the books of the company. After taking into consideration the fact of the road being completed but twenty miles, and that into a country comparatively new, we infer that the showing is one very flattering for its future prospects.

Statement of the income of the Chicago, Iowa & Nebraska Railroad to July 1st—and from July 1st to August 1st, 1857:

Passengers to July 1st.....	\$1,325 59
Freight do .....	1,690 85
Ferry do .....	732 79
Total.....	\$3,749 23
Passengers for month July.....	1,288 90
Freight do .....	1,192 62
Ferry do .....	468 60
Total income.....	\$6,699 35

Statement of the amount of freight shipped west over the Chicago, Iowa & Nebraska Railroad during the month of July, 1857:

Merchandise, lbs.....	263,271
Agricultural tools, lbs.....	48,614
Total number of pounds.....	311,885
Lumber, in feet.....	388,944
Lath, in bunches.....	716
Shingles, M.....	129

Statement of the number of passengers passed the Chicago, Iowa & Nebraska Railroad during the month of July, 1857:

Passengers East.....	1,053
Passengers West.....	1,014
Total.....	2,067

It is intended that by the commencement of the month of September the road will be completed to Yankee Run, a distance of forty miles from Clinton, at which time the business of the road must be largely increased. It will be seen by the above figures that the business for the month of July is nearly as much as for all the time preceding.—*Clinton Herald.*

**THE GUADALOUPE RAILROAD.**—The inauguration of the Guadalupe Railroad took place last Saturday, according to announcement. A large number of invited guests were in attendance, and as the cars started on their way for the village of Guadalupe, the greatest enthusiasm prevailed. Salutes were fired, and music lent its effect to the enthusiasm of the occasion. There were four cars in the train, all loaded to their utmost capacity. The President and his Cabinet, the Diplomatic corps, and a large number of ladies and gentle-

men, composed the first travelers on the road. The locomotive, as locomotives do, started off with several fierce screams, and then relapsed into its accustomed heavy breathing, until the terminus was reached.

A fine breakfast was in readiness at the depot in Guadalupe, and soon the guests were seated at table. The greatest good feeling prevailed on all sides as the repast progressed. The table was plentifully supplied with all kinds of eatables and drinkables in great abundance. In the meantime the cars returned for another load of guests, and here a serious accident occurred to interfere with the pleasures of the day. A flue in the boiler of the locomotion gave out and further locomotion was suspended. The accident, trivial, in itself to the affairs of the road, compelled the guests to find their way back to the city by carriages, a circumstance that was taken in the best good part, after such a bounteous breakfast.

Altogether we were much pleased. The road itself does great credit to Mr. Gorsuch, the engineer, and liberality and enterprise of Mr. Escandon are fully confirmed by the completion of such a noble national work. We trust he may go on and induce others to take large interests with him.

#### AN EXTENSIVE RAILROAD BARGAIN IN PROGRESS.

The trustees of the Buffalo, Corning, and New York Railroad propose to organize a new company to purchase the eleven miles of road now owned and run by the New York Central between Batavia and Attica, and, further, to consolidate with that part of the Buffalo Division of the New York and Erie, between Attica and this city. The trustees say in a circular to bondholders:

To effect this, it is proposed to form a new railroad company, represented by two millions of bonds secured by a first mortgage on the whole property; by 380,000 second mortgage bonds, and 6,800 shares of stock of \$100, or \$680,000—making in all \$3,060,000, or about \$21,500 per mile of the cost of the whole road. Of the first mortgage bonds, \$1,200,000 are to be set apart to be exchanged for the principal and interest of your bond secured by the first mortgage in the late Buffalo, Corning, and New York Railroad Company, and in addition, you are to receive not less than 30 per cent. in the capital stock of the new company. Of the remainder of the first mortgage bonds, \$640,000 and the \$380,000 second mortgage bonds and \$280,000 of the new stock are to be used for the purchase of the 34 miles of road leading from Attica to Buffalo, and the depots and freight houses in Buffalo, including all the property secured by the first mortgage on said road, or purchased by A. D. Patchin, under the foreclosure of the second mortgage, as particularly set forth in the proposed agreement. The balance, \$160,000, of said first mortgage bonds are to be reserved for the use of the Company. Several of the largest bondholders who, by their residence, are best able to judge of its advantages, have already signed the agreement. The undersigned have done the same for their interests, and invite your immediate attention and decision for yourselves. The agreement may be found at our offices.

The *Courier* of this morning adds:

It is understood here that George W. Tift, Esq., has been offered, and will accept the Presidency of the new Company, under this

arrangement, and that the road will go into operation immediately.

It is rumored that the New York and Erie Company will purchase the road from Hornellsville to Attica, and build it from Attica to this city. Should this be done, Buffalo will have two connections with the New York and Erie road, one at Corning and one at Hornellsville.

**PITTSBURGH & CONNELLSVILLE R. R.**—The Pennsylvanian says:

"The Pittsburgh and Connelville Railroad is now finished with a single track from Turtle Creek Station on the Pennsylvania road, to Connelville in Fayette county—a distance of sixty miles. By arrangements with the Pennsylvania road, its trains start from Pittsburgh, and are transferred to the Connelville road at Brinton's Station. Two passenger trains each way, and the necessary freight trains now constitute the business. For the entire distance, the Connelville road follows the rich and fertile valleys of the Monongahela and the Youghiogheny. The local trade of these valleys, consisting of the products of this rich agricultural country, and the transportation of coal, is already very large—fully equal to the capacity of the present running stock of the road. The hills of the Monongahela and Youghiogheny are filled with the largest veins of the best coal—the pits opening directly upon the railroad track almost for the entire distance. This trade is a very important one, and must constantly increase with the facilities furnished by the Company for carrying it on. The Company have gone to no great expense for buildings, depots, &c., but still it is prepared to do its freight business safely and comfortably. Its completion to Cumberland is now a matter of vital interest.

**MILWAUKEE & HORICON R. R.**—This road has been formally opened to Berlin, 94 miles from Milwaukee. The opening excursion is said to have been a very pleasant affair. In regard to the future of the road the Milwaukee Sentinel says:

"The opening of the road to Berlin is duly celebrated, and its receipts will tell the story of its importance; but the Directors do not stop. Right forward they go toward Stevens Point and the pineries, and we shall have the pleasure of celebrating again at the Wisconsin river, by this time next year, in all probability. Quiet determination—steady perseverance—characterize the management of the affairs of the Company. They have no quarrels with anybody, but go right forward, building their road at comparatively small cost, yet substantially, and have everybody's good will. They deserve success, and are winning it every day."

**NEW PROJECT IN PENNSYLVANIA.**—A project has been started at Easton Pa., which has for its object the construction of a Railroad from Freemansburg on the North Pennsylvania R. R. to the Delaware Water Gap, by way of Easton.



## RAILROAD RECORD.

### TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &c.

Amount of Loan.	Rate of Int'r't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Ln'n of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hmp'sr	.....	173	6,000,000.00				
498,800	0			1862-3	2d	.....	Androscog'n & Kennebec	.....	54.55	1,400,000.00				
199,000	7	July & Jan.		now	Domestic.	.....	Atlanta and LaGrange..	.....	86.5	1,000,000.00	199,000.00	209,475.46	110,246.98	none.
52,046	6			1860	"	.....	B'ng'r, Old T. & Milford..	.....	12.5	135,000.00	52,646.26	278,187.74	173,760.74	4 pr. ct. 6m
500,000	7		N. Y.	1866	1st mortgage.	.....	Boston & Worcester..	.....	44 5-8	4,500,000.00	500,000.00	39,104.40	8,671.61	15,000 in '33
500,000	7			1857-9 62	Income.	.....	Buffalo & State Line..	.....		1,300,000.00		1,108,781.50	437,062.03	180,000 4.5m
300,000	7			1864	Domestic.	.....	" " "	.....						5 pr. ct. 6m.
200,000	7			1872	4th mortgage.	.....	Central Ohio..	.....						
577,187	6			1874	1st mortgage.	.....	Champ'n & St. Lawrence	.....	43	1,872,800.00	1,001,057.00	168,200.00	77,700.00	10 per et.
192,200	7			1864-7	Domestic.	.....	Ch'r'l'te & South Carolina.	.....		1,750,000.00	380,000.00	291,219.86	47 per et.	\$72,300
380,000	7		N. Y.	1868-9	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	.....	88	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,440,000	6-7-8			1868-76	2d	.....	" " "	.....						
1,300,000	8				Convertible.	.....	" " "	.....						
374,000						.....	Chicago, Fulton & Iowa..	.....						
1,300,000					1st mortgage.	.....	Cin. Will'ng'n & Zanes'vilo	.....	5	1,701,149.16	2,241,500.00	221,491.96		
532,000					2d	.....	" " "	.....	23					
104,000					3d	.....	" " "	.....						
305,500					Income.	.....	" " "	.....						
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	.....	94	4,741,220.0		1 3,754	700,204	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning..	.....	85	1,500,000.00				
400,000	7			1864	2d	.....	" " "	.....						
000,000	7			1873		.....	Cumberland Valley.....	.....	52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00			
350,000						.....	Eastern Railroad..	.....	93 6-10	3,345,900.00		665,578.79	288,047.84	\$234,133
740,000	7			1869	1st mortgage.	.....	East Ten. & Virginia..	.....	130	625,450.00		30,897.30	19,692.30	
88,000	10			1861	1st	.....	Essex Railroad..	.....	20	700,000.00				
400,000	10			1864	2d	.....	Evansville & Crawf'd'vle	.....	109	2,228,657.50		243,970.42	136,061.90	\$133,221.45
200,000					1st mortgage.	.....	The Fitchburg (Mass.) R.R	.....		3,540,000.00		681,162.52	213,837.81	3 per cent.
						.....	Fox River Valley..	.....	33	800,000.00				
						.....	Fair Haven Branch....	.....	15	300,000.00		50,381.33	14,822.45	\$166,240.00
						.....	Georgia RR & Banking Co	.....	233	4,156,000.00		1,068,202.59	357,659.42	\$166,240.00
						.....	G'tt Falls & Conway R.R.	.....	20			27,576.69	14,207.07	
						.....	G't West'n R.R. of Can..	.....	281 1/2	4,191,550.00		2,068,636.00		8 pr. ct.
	6 1-9			1860-70	1st	.....	Housatonic Railroad.	.....	74	2,000,000.00		339,196.50	176,529.93	
4,000,000	7			1860	2d	87 1/2	Hudson River.....	22	144	4,000,000.00		1,924,382.44	718,037.40	
2,000,000	7			1875	3d mortgage.	58	" " "		144	4,000,000.00				
1,812,000	7			1875	1st	93	Illinois Central R. R..	112	144	4,000,000.00				
12,885,000	7			1860	Freeland.	64 1/2	Indiana Central.....	48	72 1/2	18,453,376.00		1,476,035.27	1031,499.08	7 pr. ct.
4,115,000	7				1st mortgage.	64	" " "		704	3,558,376.00				3 pr. ct.
3,000,000	7			1862	2d	80	" " "					354,871.00		
600,000	7	Nov. 1.			1st		" " "							
700,000	7	Jan. & July 1			1st mortgage.		" " "							
50,000	7				2d		" " "							
700,000	7				1st		" " "							
					1st mortgage.		" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							
							" " "							



## LONDON QUOTATIONS

## AMERICAN STOCKS AND BONDS.

July 31st, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort. conv. 1858, ..	"	"
Cin. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	60	64
Erie, 3d Mortgage, 1883, ..	78	82
" Sinking Fund, ..	73	78
" conv. 1862, ..	62	67
Grand Trunk (Canada) Debenture, ..	87	88
Great Western " conv., ..	107	109
" " non-conv., ..	109	113
Illinois Central, 1st Mort., 7's, ..	87	88
" " with option 70 per cent. shares till Jan. 1858, ..	103	106
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	82	84
Little Miami 1st Mort. not conv. 6's, ..	"	"
Marietta and Cincinnati, 1st Mort., ..	"	"
Michigan Central, conv., 8's, 1860, ..	90	91
do do do 1869, ..	90	91½
N.York Central. No Mort. Not conv. 6's 80 " 82		
" " conv., 7's, ..	89	91
Ohio and Mississippi, 1st Mort., ..	"	"
Ohio and Pennsylvania, Income 1872, ..	65	68
Panama. No mort. conv. 1866, ..	"	"
Pennsylvania, 1st Mort., conv., ..	86	88
" " Sterling, 2d Mort., ..	90	95
Stenbenville and Ind., 2d Mort., ..	"	"

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent

## CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

## MERCHANTS' EXCHANGE

## AND AT PRIVATE SALE.

BY HEWSON &amp; HOLMES.

For the week ending August 26, 1857.

## BONDS.

Little Miami R. R. Co. 6 per cent. 1st Mortgage Bonds, ..	80
Cincinnati, Hamilton & Dayton R. R. Co. 7 per cent. 1st Mortgage Bonds, ..	88
Do. 2d do do ..	82
Covington & Lexington R. R. Co. 6 per cent. 1st Mortgage Bonds with interest, ..	68
Do. do 7 per cent. 2d Mortgage with interest, ..	67
Indianapolis & Cincinnati R. R. Co. 7 per cent. 2d Mortgage Bonds, ..	80
Ohio & Mississippi R. R. Co. 7 per cent. 2d Mortgage Bonds, ..	55
Hillsborough & Cincinnati R. R. Co. 7 per cent. 1st Mortgage Bonds, ..	50
Covington & Lexington R. R. Co. 10 per cent. Income Bonds, ..	65
Indiana Central R. R. Co. 10 per cent. Income Bonds 90	
Columbus & Xenia R. R. Co. 7 per cent. Dividend Bonds, due 1866, ..	85
Little Miami R. R. Co. Dividend Scrip, ..	80
Cin., Ham. & Dayton do do inc. int., ..	120
Indianapolis & Cin. do do do ..	70
Cincinnati 6s of 1884, ..	80
Central Ohio R. R. Co., 4th Mortgage Bonds, ..	25
Cincinnati & Chicago R. R. Co. Real Estate Bonds various, ..	15 to 25
State of Ohio Township Bonds, various, ..	40 to 50
do do County do do ..	80 to 90

## STOCKS.

Little Miami R. R. Co. ....	89
Columbus & Xenia, ..	87½
Cin., Hamilton & Dayton, ..	67½
Indianapolis & Cin. ....	62½
Indiana Central, ..	48
Covington & Lexington, ..	18
Marietta & Cincinnati, ..	17
Hillsborough & Cincinnati, ..	17
Mad River & Lake Erie, ..	15
Ohio & Miss. ....	11½ to 12
Eaton & Hamilton, ..	18
Junction (Ind.), ..	7½ to 8
Farmers' Bank of Ky., ex-dividend, ..	118½
Ohio Life 1 s. & Trust Co. Bank, ..	100

## MONETARY AND COMMERCIAL.

The great event of the week, and the one which has absorbed all others, has been the suspension of the Ohio Life Insurance and Trust Company. The unlimited confidence which has been so long reposed in this institution, the extent of its operations, and the respectability of its officers was such that no event of any character could have been more unexpected or startling. It was evident that the trouble could not have originated here. The institution here was fair and aboveboard, its operations legitimate and safe, and its statements satisfactory; but there was an indefinite and mysterious some

thing in the operations of the New York office, as revealed in the transactions of the last few days, that filled the community with alarm. If an institution which at home was perfectly safe and legitimate could countenance operations abroad which might result in the loss of millions in a few days, then indeed the last props of shshen confidence were knocked away, and there was no prophesying where the evil might end.

To-day, however, matters are assuming a more cheerful appearance, and the probability that the company will prove solvent is greatly increased. We publish in another column the official statement of the officers.

In other respects the money market has been quiet. The offerings of paper have been light, and mostly accepted by the regular houses at their usual rates.

Stocks are dull, owing mainly to the absorption of attaction by the bank difficulties.

There has been a decline in flour, grain and whisky.

At the East we notice an excitement in Wall street proportioned to the heavy transactions recently carried on in the Stock Boards and the bank difficulties resulting from them. Jacob Little is reported failed for five million dollars. There are other large operators in the same category, but the details have not transpired. The real state of the case is that the brokers' board has been reduced to the level of a faro bank; it has become openly a mere field for gambling—betting on securities—and will so remain as long as many of its present regulations continue in force. And bankers have continued to repose the same confidence in it that they would have done had it consisted of bona fide buyers and sellers of stock securities. So long as the system of paying differences is sustained, just so long will it be unsafe to trust the operators in the board. If the whole system could be remodeled; if the board could be brought back to a place for legitimate buying and selling of stocks, it might, in course of time, redeem its position. Till then it is unworthy the confidence of the public.

## SALES AT THE NEW YORK STOCK BOARD—Aug. 24.

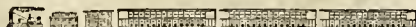
\$1,000 Missouri State 6s, ..	77½
5,000 Tenn. State 6's, '90, ..	84½
1,000 Illinois Central R. R. Bonds, ..	98
7,000 Terre Haute and Alton 2d mort. Bonds, ..	52
3,000 La Crosse & Mil. Land Grant Bonds, ..	38
5,000 N. Y. Central 6s, ..	87
2,000 Lake Erie & W. 1st Mortgage, ..	23
400 shares New York Central, ..	75½
175 " Penn. Coal Co., ..	70
65 " Del. & H. C. Company, ..	114½
500 " Cumberland Coal Co., ..	15
5 " Cleve., Col. & Cin., ..	94
350 " Erie, ..	28
10 " Mich. Cent., ..	76½
100 " Mich. S. & N. Ind., ..	27½
55 " do do do pref., ..	54
200 " Reading, ..	66½
150 " Panama, ..	90
100 " Illinois Central, ..	112
100 " Cleveland & Pittsburg, ..	30
34 " Galena & Chicago, ..	87
1425 " Cleveland & Toledo, ..	45
100 " Chicago & Rock Island, ..	90
50 " Milwaukee & Miss., ..	48
50 " LaCrosse & Milwaukee, ..	23

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pat. tern. 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.  
febl9-1m

## PERU &amp; INDIANAPOLIS R. R



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash and Toledo; also Logansport and Latayette.

Passengers coming South from T. W. & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Frtght Ag't.  
Indianapolis, Sept. 16, 1856. [mh29-1y.

## BREVITIES.

**LEXINGTON & DANVILLE R. R.**—A letter from General Coombs the president of this road says, "We are daily crowding the Covington Cars. I can't get enough to bring off the coming in produce—especially wheat—at Nicholasville.

The stock too begins to find out that we have a shipping point, and we are fixing it up in the best style."

**BALTIMORE & OHIO R. R.**—In consequence of an interruption of the Broad Trec Tunnel, this road has built a temporary track over the hill, and freight and passengers now take that road.

**ALEXANDRIA, LOUDON AND HAMPSHIRE R. R.**—At a convention of the friends of the extension of this road to the Ohio river, held at the Upshur county Court-house on the 5th inst., at which were present one hundred and eighty-two delegates from thirteen counties of Virginia, a committee of twenty was appointed to draught a memorial to the next legislature of Virginia in favor of the extension of said road through Western Virginia to the Ohio river, at Buffington's Island, or at a suitable point South of it.

**LA CROSSE & MILWAUKEE R. R.**—The track on this road was nearly completed to Kilbourne city at latest advices. The cars are probably now running to that point.

**TELEGRAPHS IN THE WORLD.**—There are estimated to be about 80,000 miles of Electric Telegraph in the world, nearly half of which is in the United States.

## STATISTICS OF THE IRON MANUFACTURE GREAT BRITAIN.

The following results have been collected from various authorities, including Marshall's *Statistics*, Porter's *Progress of the Nation*, Returns from the Iron Districts and from the Custom-house to Parliament, showing at different periods, from 1788 to 1857, the prodigious wealth created for the British empire, out of materials abundant, and otherwise useless, by the inventions of Henry Cort.

## IRON MANUFACTURE.

1. The total make of pig iron annually with pit coal, from 1788 1856, is more than 60,000,000 tons.

2. The total make of rolled and other forms of wrought-iron, allowing for waste, is 30,000,000 tons, and the saving to the country, at 30l. per ton, the average price previously paid for foreign iron, is 900,000,000l.

3. The total saving by railway conveyance is estimated by Mr Robert Stephenson to be now progressing at the rate of 40,000,000l. annually, and the aggregate saving for the last twenty-seven years may be estimated at 300,000,000l., being more than the whole cost of the railways referred to by Mr. Stephenson.

4. The total quantity and value of British iron of all sorts, and steel, exported, from 1792 to May 31, 1857, is not less than 16,987,167 tons, and the value received from foreign countries, 179,975,345l. sterling.

5. The total value of hardware and cutlery exported, from 1805 to 1857, at different periods, is 85,394,864l. sterling.



6. The total value of machinery, steam-engines, &c., exported, from 1822 to 1857, is 25,192,555*l.* sterling.

7. The total general amount saved by increased export, received from foreign countries, is 290,562,764*l.* sterling.

8. The amount saved by decreased import, from 1792 to 1857, being so much less paid to foreign countries for bar-iron, is 33,778,540*l.*

#### GENERAL SUMMARY.

Total amount saved by 30,000,000 tons of bar and other forms of wrought-iron made out of materials abundant, and otherwise useless, and by the employment of 600,000, of the working classes for three or four generations.....	£900,000,000
Total amount saved by railway conveyance.....	300,000,000

Total.....	£1,200,000,000
------------	----------------

The total saving now adding to the wealth of the nation is not less than 100,000,000*l.* annually.

#### DIFFERENCE OF EXPORT AND IMPORT.

Total amount saved by increased export.....	£260,562,764
Total amount saved by decreased import.....	33,778,540

The total number of puddling, balling, and heating furnaces patented by Henry Cort, and now in use in Great Britain, is estimated by Mr. Truran, late engineer at the Cyfartha and Dowlais Iron-works, to be 8,200, while the grooved rollers, also patented by Henry Cort in 1783, are now used by this and all other nations for making bar and other forms of wrought-iron, at the rate of 20 tons for 1. in the same time, and with the same number of hands, as compared with the forge hammer. The total number of furnaces patented by Henry Cort in 1783 and 1784, and now used for making iron in this and all other countries, is not less than 16,000.

These services have rendered the British nation independent of foreign powers for that most indispensable article—bar-iron—not only for the last 70 years but for ever. They have secured the safety of our fleets, the lives of our seamen, and the defense of our forces, sea and land, not only for 70 years, but for ever. They have provided the British nation with more than sufficient wealth to pay all the expenses of the three last wars, and have principally aided in bringing those contests to an honorable and triumphant conclusion.

For these services the Cort family have received no remuneration. Henry Cort having sacrificed the whole of his private fortune, 20,000*l.* in bringing his invention to perfection, being 15,000*l.* more than all the pensions received for the last 64 years!

The *Times*, with more than 50 other influential journals in this country, as well as the *Scientific American*, published at New York, in December last, have each and all denounced, in powerful leaders, the ingratitude of the British nation to Henry Cort. See also *Times* and *Examiner* last week.

Henry Cort was ruined by the defalcations of a servant of the Crown, of which he was neither directly nor indirectly conscious or blameable. The Son of the latter being the partner of Henry Cort, was placed in possession of all the trade and works, and held possession of the whole exclusively for his own benefit for 30 years, that he might not impeach the misapplication of the nation's trust in others to a prodigious amount. Henry Cort was robbed of all his patent rights and property, worth when they expired in 1798, at least 250,000*l.* by virtue of an *extent* obtained by one of the defaulters swearing that he had paid money to Henry Cort, which he himself had never paid; while the greatest defaulter ever known to the State afterwards

obtained from the Lords of the Treasury nearly 25,000*l.* by a statement *equally false*, only four days after the decease of Henry Cort, when he was no longer living to expose the imposition. This act was denounced in the House of Commons, in 1805, as money obtained from the Crown under false pretences.

"Let any one think," says the *Times* of July 27 last, "of our iron fleet, iron gun-boats, iron mercantile marine, iron railways, iron engines, iron cotton mills, iron suspension and tubular bridges, iron batteries, iron palaces, &c., and then ask himself what should be the measure of public gratitude to the descendant of a man who endowed his country with such an amount of wealth and power."

Lord Palmerston is the only Prime Minister, during the last 30 years, who has given attention to the claims of the Cort family, by instituting inquiry into the merits, and giving some proof of a generous desire to save from destitution and want the only living son of the late Henry Cort, now more than 73 years of age. The pension of 50*l.* per annum, recently granted, has been almost wholly swallowed up for years by incumbrances from previous destitution. Under the auspices of Lord Stanly, who has presented a memorial to his Lordship, praying for further inquiry, backed by the highest scientific engineer and practical authorities, and supported by more than 50 members of Parliament, the descendants of Henry Cort—one son and three daughters—may yet hope for some more adequate compensation from the British nation, than hitherto received.—*London Mining Journal*, July 18.

#### ON THE ORES OF COPPER, CINNABAR, SILVER, GOLD, PLATINUM, OSMIUM, IRIIDIUM AND PALLADIUM.

The concluding lectures before the Government School of Mines, England, were on the above ores. The lecturer's remarks were in substance as follows:

Native copper; this contains about 99.8 per cent. of pure copper, and is found in several localities. Of late years the district of Lake Superior, in the United States, has been celebrated for the large quantities which it has produced; in Cornwall there are several places where it is found, and amongst them may be noticed Wheal Buller and the Consolidated Mines. Red oxide copper; this is a valuable ore; it is of various shades of red, and by transmitted light sometimes crimson red. Before the blowpipe it is reducible on charcoal, and with borax fuses into a fine sea-green glass. Malachite or green carbonate of copper; large and beautiful specimens of this have been obtained from the famous Burra Burra Mines in South Australia. This contains about 72 per cent. of copper, and is easily reducible. Blue carbonate of copper; the best specimens of this beautiful mineral were formerly found at the mines worked at Chessy, in the neighborhood of Lyons; it crystallises in a variety of forms, sometimes occurring massive, and at others columnar or tabular. It generally contained 3 equivalents of copper to 2 of carbonic acid. Black oxide of copper is of brownish-black or black color; it occurs in most of the Cornish mines, and has likewise been observed at Chessy, in Peru and Siberia, though in small quantities. The most remarkable deposits of malachite are those in the Ural Mountains, where it is found in such large slabs that it can be used for ornamental purposes. They could all remember the products of that mineral which were sent from Russia to the Great Ex-

hibition of 1851. Another locality is the Burra Burra Mine, and it is sometimes met with in the Banat, but is of rare occurrence in England. The blue carbonate sometimes accompanies the other; a series of pseudomorphous changes are, however, going on, which shows how careful painters ought to be in their colors, as sometimes very curious variations occur in frescos. The painter may have laid on a sky-blue color and this, by a pseudomorphous action, has become a green. Chrysocolla is a mineral very similar to malachite, but contains a considerable proportion of silica and water—it is a very rare mineral. Two splendid specimens of this were exhibited—the one from the Phoenix Mine, the other from Cosheen. Diopside; this crystallises in six-sided prisms; it has a most beautiful appearance, similar to that of the emerald. Its hardness is 5. Linarite, a cuprous sulphate of copper, has a fine lustre; almost adamantine, and translucent. This is only met with, in large quantities, at Linarès in Spain, Lead and Hills in Scotland, in some cases where a decomposition of this mineral has taken place, it has been found that the burrows which have been abandoned, would repay the cost of again being picked. Copper glance vitreous, gray copper or redruthite; this mineral has received its designation from the district of Redruth, where it is obtained in considerable quantities. Hardness from 2.5 to 3. Externally it is of a black color to a lead gray and is one of the most valuable ores for sulphur, and contains from 75 to 80 per cent. of copper. It is found near Redruth, Camborne, at Botallack Mines, near the Land's end, at the St. Ive's Consols, and the Levant Mines; in Hungary in not many localities; in Germany, in Tuscany, and likewise at Knockmahon Mines, in the county of Waterford. Copper pyrites; this is the most abundant variety of copper. A fine specimen of this, from Herodsfoot Mine was exhibited and described. Many parties were apt to confound this mineral with iron pyrites, from which it totally differed. Its hardness is from 3.1-2 to 4. In its pure state it contains about 34 per cent. of copper. It is sometimes found cropping out at the surface but more generally at depth. Sometimes it is called peacock ore from the varieties of colors it assumes; but this is not to be confounded with the buntkupfererz or purple. This occurs in the cubical form; the fracture is uneven, and the hardness 3. People who see stones of this ore at the surface are led to prosecute mines in the hope that the ore will be of the same richness, and as this is very seldom, it frequently leads to great disappointment. It has lately been found in considerable quantities at the mines of Monte Catini, in Tuscany. Gray copper, or Fahlerz, tetrahedral copper glance sometimes called gray copper ore, though this is not a proper name for it; besides a large percentage of copper, it generally contains a considerable quantity of silver, sometimes as much as 30 per cent. Mercury is occasionally one of its constituents, and 13 per cent. of that valuable mineral has been found. It is not common in Great Britain, though it ought to be looked after. Some fine specimens of it have been obtained from the Crinnis mines, near St. Austell. Atacamite, or muriate of copper, crystallises in the rhombic prismatic form, is found at Remolinos, in Chili, and in the Acatama Desert in Peru, from whence it derives its name; it likewise occurs in the iron mines of Swartzenburge, in Saxony, and on the lavas of Mount Vesuvius, where it is formed by the union of muriatic acid, and carbonate of copper. Before the blowpipe it gives the flame a bright blue or green tint. Condurite, which is found in Carn Brea, is supposed to be an arseniate of copper. Olivenite is a combination of arsenic acid and oxide of copper: its color is from olive to blackish green. Some thirty or forty years since, considerable quantities of



this mineral used to be raised from the mines in the vicinity of Redruth: some beautiful specimens have been obtained at Tincroft. Copper mica, sometimes called calcophilite; hardness from 1 to 1.1-2; its primary is a right rhombic prism; is found in cavities of calamine associated with barytes, calcareous spar, or quartz, in Siberia, the 'Tyrol Libethen' in Hungary, and Matlock in Derbyshire.

Mercury; this occurs in the native state in but few localities, and only in small quantities, generally in the form of globules disseminated through the matrix of the stone. Native amalgam crystallises in the cubical form; hardness from 3 to 3.1-2; specific gravity 14; it is found principally at Rusena in Hungary, and Moschellandsberg in Zweibrücken. Cinnabar, or sulphuret of mercury, crystallises in the rhombohedral form. Considerable quantities of this are raised at Almaden, at Idria, and in the Alps of Carinthia. At Almaden it is found in large veins, but at Idria, only in small deposits; with regard to these last there is a report which has long been current and generally believed, but which has no foundation in truth, that the persons working in the quicksilver mines there are political prisoners, but this is not the fact, as the miners there are as free to come and go as they would be in any other employment. Great care is taken of the ventilation, and when from the decomposition of the mineral it is likely to become detrimental to the health of the men, they are immediately removed, and that they are not allowed to work for any considerable period in a close end. This mineral soon tarnishes on exposure to the atmosphere. Several varieties were then exhibited and described. It has been found in Ripa in Tuscany, and some quantities have been obtained from Rosenau; of late years it has been discovered in California, and the Chinese possess mines of it. Its other localities are Peru, Mexico, Chili, and Kremnitz in Upper Hungary, where it permeates many portions of the upper part of the vein. The same phenomenon has been observed at Felsőbaya, where it colors crystals of barytes, and in Bohemia, where it performs a similar part, with quartz. Hepatite cinnabar, or liver ore; occasionally, from its color, it is denominated brick ore. A number of these ores have to pass through various mechanical processes before they can be rendered available for commercial purposes.

Silver; it was of great importance when ores of this metal and mercury occurred together. Several ores of this kind, owing to their not being known, had often been wasted and thrown away. Native silver crystallises in the cubical form; its most remarkable crystals are found at Kongsberg in Norway. That which is obtained from this locality contains also a proportion of mercury and antimony. Native silver was often found drawn out in very fine capillary forms. Some specimens from Kongsberg were exhibited and their crystallography illustrated by diagrams and models. Sometimes they were so tarnished that they assumed a red color and could often be taken for native copper. It was met with in other minerals, such as zinc blende, iron pyrites, quartz and feldspar, but rarely with selenite. Chloride, or horn silver; its primary form is the cube; it is generally found in incrustations, and so soft that it can be scratched with the nail. Its hue is grayish or greenish, and is so easily to be reduced, that it is fusible in the flame of a candle. Its specific gravity is from 4.3-4 to 5.1-2. It is found in two or three mines in England, in the vicinity of Callington, as well as in the Channel Islands, at the Isle of Sark. Bromide of silver contains about 80 per cent. of the precious metal. Silver glance is of a dark lead gray color, with occasionally a superficial iridescent tarnish; it generally crystallises in the cubical form, assuming also various reticulated, arborescent, and filiform shape and often

contains as much as 87 per cent. of silver; it is found in the mines near Callington, has been met with at Dolcoath, in Freiberg, in various parts of Hungary, and in several provinces of South America; its greatest locality, however, is Mexico, most of the silver obtained from the mines of Guanajuato being extracted from this ore.

Stephanite is another variety, so called from the Arch-duke Stephen, formerly palatine of Hungary; its hardness is 2.1-2, and its specific gravity 6; it is found in South America, Hungary, and Friedberg. Polybasite is a rare substance, of an iron black color, with a streak of the same hue, as met with at Guarismay, in Mexico; it occurs in a rhomboidal form, in tabular shaped six-sided prisms. Red, or ruby silver (rothgultigerz), is sometimes found of a dark and at others of a light reddish tint; its crystals are sometimes very complex. It is met with in Hungary, Freiburg, South America, Kongsberg, in Norway, Guadalcanal, in Spain, and at St. Marieaux Mines, in France, occasionally in dendritic forms. The two varieties differ in specific gravity, the light being about 5.6, and the dark 5.9. From the value of silver, it will be seen that a very small percentage will pay for extraction; much must, however, depend upon the locality, the cost of transport, and the expense of reduction.

Gold is found native sometimes in combination with tellurium. In the eastern part of Hungary it is largely worked, and in the matrix in which it is contained not a particle of the precious metal is to be seen; it crystallises in the cubical system, and a number of small forms. The crystals from Siberia are in aggregated masses, and sometimes so exaggerated that they appear like those of native copper and silver. In Transylvania, it occurs in tin plates, and is commonly found in small grains disseminated through the stone, or in minute scales, as in stream gold; occasionally as in pebbles, or in what are denominated nuggets; its hardness from 2.1-2 to 3, and its specific gravity 17 to 19.1-2. Its color, gold yellow, brass yellow, or nearly approaching to silver; in all cases it contains more or less of that metal—in some instances only from 1 to 2 per cent. in others 40 per cent. An analysis from Hungary, by Rose, gave gold, 84.89; silver, 14.68; copper, 0.04; iron, 0.13. From California, by Henry, gold, 86.57; silver, 12.53; copper, 0.29; iron, 0.54. The gold from Australia was finer than that from California. They were all aware that there was something seductive about a gold mine, and people generally rushed to explore it. In most cases, this was a great delusion, as there were many minerals, the prosecution of which repaid the labor bestowed upon them much better. The greatest quantities of gold that had been produced had not been from mines, but the beds on the shelf of the rock; a diagram of this was shown and described. The diggers in one hole would be very fortunate, whereas those who were a few yards separated from them might be quite the reverse. Those acquainted with stream works knew the method of selecting them; and much depended upon this knowledge; it was requisite they should be acquainted with the nature of the gravel, and where the gold was likely to be met with. It would always appear to have traveled some distance, as it was invariably rounded, and it was no uncommon instance that after a stream works had been exhausted, a few years later a second party would go there, and meet with fortunate results by again re-washing the gravel, some of the streamers being of opinion that the gold grew. The fallacy of this erroneous idea it was not necessary for him to dilate upon. The subject of gold in quartz veins was a question of great delicacy, both in California and Australia. They had heard much about gold in England; a specimen which he had was from

Dolgelly, in North Wales. This was exhibited. They would observe that it was very rich; he would not say this would be continuous, but he thought that where so much was found it was worthy of a trial. A great cause of the failures that had arisen in California had probably been derived from the fact that, although in some portions of the vein gold had been found, yet they might go on fathoms and not find a single particle. In the Alps of Salsberg, and in Hungary and Transylvania, the ores contain both gold and silver. At Schemnitz, when the quartz had an amethystine tint, it was generally considered more favorable for gold. At Torospatak, it is curious that the gold occurs in conglomerates. In Hungary, a very small quantity pays; in several of the mines, they consider that, out of 50 tons, which is equal to 1,000 cwt., if 4 oz. were obtained it would make a profit. In North America, the ores are in general rich, but occur in small quantities. It was a great question, where gold was only associated with quartz, whether it would ever pay, unless mixed with some other mineral. It was met with brown iron ore in Siberia, and with jacotinga (a sort of micaceous iron ore) in the mines of the Imperial Brazilian and St. John Del Rey Companies. It is likewise found with iron pyrites, galena and zinc blende. Gold has been discovered in other numerous localities, in every country of the world, whether civilized or not, in the Rhine, the Rhone and the Danube; in the latter river for a long period by the gypsies, who have settlements on the border of that stream. It is only about 30 years since it has been explored in the Ural Mountains. The Discoveries of California and Australia were fresh in their memories, and needed no further allusion here.

Platinum is only found in a few localities where gold is met with. It crystallises in the cubical form, and is in grains or pebbles, its hardness is from 4 to 5, and its specific gravity 17 to 19; it is generally associated with iron. Its principal localities are in the eastern parts of the Ural Mountains and South America. It has lately been discovered in New Granada. At a very recent date, attention has been called to its discovery in the French Alps, in the Fahlerz. In the Ural Mountains it is in the serpentinous rocks, and the same may be noticed in Borneo.

Palladium is always associated with platinum; its specific gravity is 12. Iridium is met with in grains in Siberia; its hardness is from 6 to 7, and specific gravity 22.7; Briethaupt, however, states it is 23. The color manufactured is valuable in porcelain painting. Osmium has a specific gravity of 19.4, alloy of iridium and osmium, commonly called iridosmine, is employed for the purpose of manufacturing gold pens, the nibs of them not being liable to corrode, and being much more durable than those of steel or any other metal.

## To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great Wabash River, in White county, and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.



## The Polytechnic College of the State of Pennsylvania.

WEST PENN. SQUARE.

The Polytechnic College, incorporated by the Legislature, 1853, on the plan of the Industrial Colleges of Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy, and Architecture.

Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to Dr. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia.  
Aug. 20-6t

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by  
CHARLES W. COPELAND, Gen. Agent,  
jy30 No. 66 Broadway, N. Y.

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**  
THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale and retail, by  
GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.  
MIDDLETON, WALLACE & CO.,  
jan8-1y 119 Walnut st., Odd Fellows' Building;

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery.

Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building.  
jy9-2m

## SAFETY & ECONOMY.

**JAMES HARRISON JR.'S**

Automatic Steam Whistle,

FOR LOCOMOTIVES.

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to  
JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,**

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

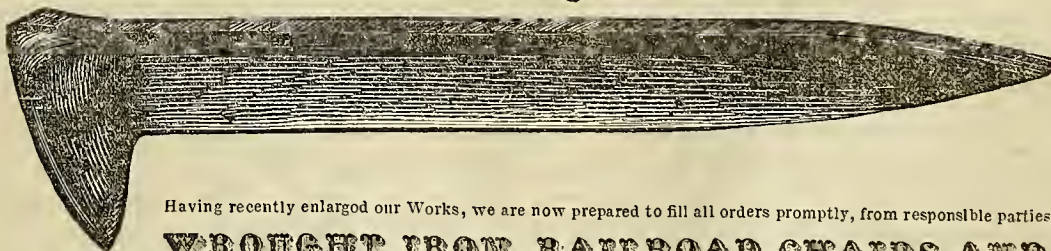
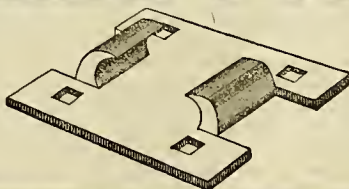
Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.  
feb5-1y

## CINCINNATI WROUGHT-IRON

# RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.  
FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent.

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK, Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS, To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Cleveland in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus, and at all points between Cincinnati and Cleveland.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

FOR TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnbuses L

Office No. 2 Burnet House.

1856.

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, CLEVELAND, ST. LOUIS, LAFAYETTE, DUNKIRK, LOGANSPOUT, BUFFALO, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:30 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## “STEAMER BAY CITY.”

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

## Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:35 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

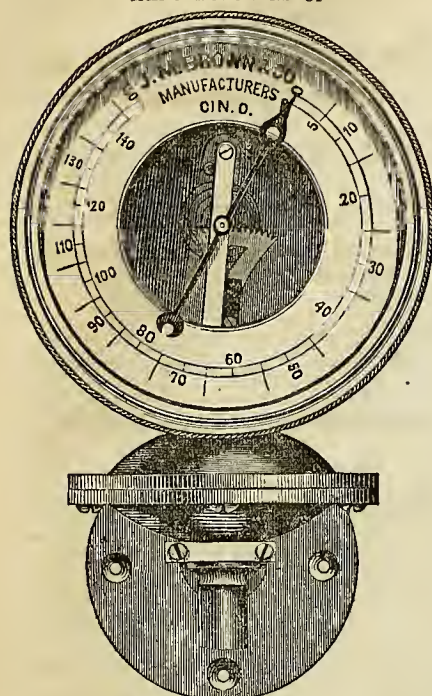
The Omnbuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.



**J. M. BROWN & CO.,**

MANUFACTURERS OF

**IMPROVED  
Corrugated Steel Spring Gauges,**

FOR

**LOCOMOTIVES AND STATIONARY ENGINES.**

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Sican Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

250 East Front street, Cincinnati, O.

**Prosser's Patent  
LAP-WELDED  
IRON BOILER TUBES,**

Every article necessary to

**DRILL THE TUBE-PLATES**

and to set the tubes in the best manner. Tube Cleaners, Seal-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tweezers.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**

32 PLATT STREET, New York.

**Frank T. Foster,**

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Encamping tents for encamping. June 24, 3 mos.

**Norris' Locomotive Works.**

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27. RICHARD NORRIS & SON.

**IRON BOILER FLUES  
PASCAL IRON WORKS.****MORRIS, TASKER & CO.,**

Manufacturers of

**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc. Warehouse, 85 South Third St. PHILADELPHIA. Aug

**RAILROAD IRON.****LOCOMOTIVES.**

4,000 Tons rails, 55 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GOODMAN &amp; CO.,

Feb. 7, '66-2m.]

no. 7 Wall st., N.

**RAILROAD CAR**

AND

**COACH TRIMMINGS.****DOREMUS & NIXON**

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

**IMPORTERS**

OF

**Plain and Figured Mohair Plush.**

Printed and Unprinted, Entirely New Designs;

MOQUETTES &amp; VELVET CARPETS;

Enamelled Cloth, for seats &amp; backs of Cars

**ROPE MATTING, Every Width.**

Oil Cloths for Head Linings, Enamelled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT.****FOR CUSHION & MATTRESS FILLING**

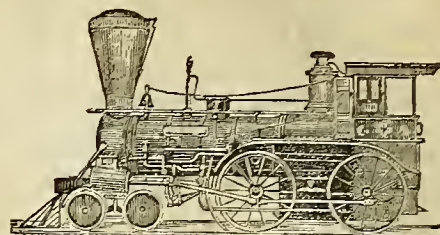
N. B. We have the Plush in bond for exportation.  
Sept 18 DOREMUS & NIXON

**W. G. ATKINSON,**

Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

**RAILROAD** routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological maps prepared. mail-ly

**CINCINNATI  
LOCOMOTIVE WORKS.**

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, holts for bridges cut with dispatch. ap.20 MOORE & RICHARDSON.

**Railroad Car Findings**

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS.**

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows, Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trim-  
mings for windows and Seats. Varnish, Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.  
Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Kings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport &amp; Bridges, Car Manufacturers,

Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges &amp; Co., Fitchburg, Mass.

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer, Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Phe Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

**SILVER MEAL.** (The highest prize) awarded to these pumps at a Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855-1

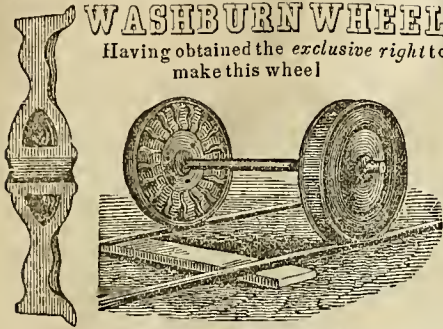


## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati.— Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage, Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.

### WASHBURN WHEEL

Having obtained the exclusive right to make this wheel



In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.  
Jan.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

Machinery and Machinists' Tools,  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHTS,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globes and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures  
Brass Work

Domes, Escapo Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,  
CAR FINDINGS,

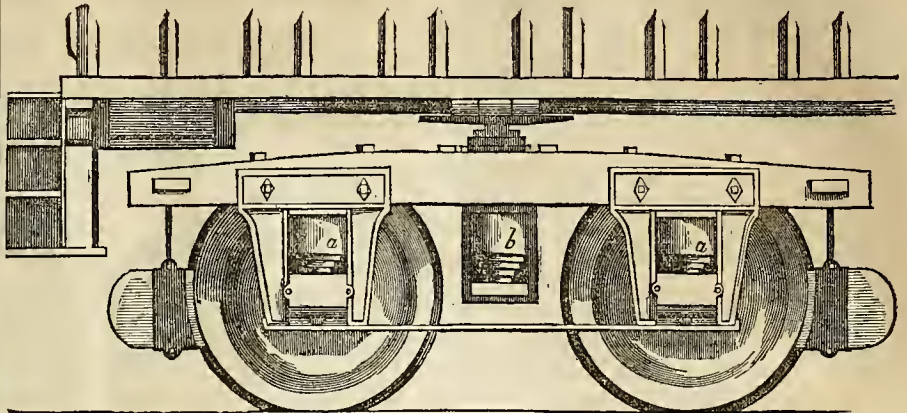
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED.

cc23-ly

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT. . . . M. D. WELLMAN. . . . C. M. RUSSELL

## DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* JOSEPH DAVENPORT.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description,  
Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are sole agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Jan. Muskingum Works, Zanesville, O.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,  
1 n2 NEWARK, N. J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Supt.

Racine, May 15, 1857.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cin- cinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1600 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-tf 10 Wall st., near Broadway, New York.

**SILVER, GOLD, LEAD,**

And Other Minerals,

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUNAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING Co., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'th, O.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE

### RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes Copying.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAS. J. BUTLER, Agent and Manufacturer.  
Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in different freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

### ANDERSON, GATES & WRIGHT,

### STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed beadings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(SUCCESSORS TO JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

POOLE & HUNT,  
Iron Founders & General Machinists.

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS and AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 228 H Street, Washington, D. C. apr12

### Thorough Bed Stock

### FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

### SHORT HORN BULL,

### "TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....SEPTEMBER 3, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS PER ANNUM, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	50 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS—NO. 28.

#### EDITORIAL.

The War Upon Railroads and the Future.....	445
The Illinois Southern Railroad.....	445
The Atlantic Telegraphic Cable.....	446
The Erie R. R. and its Boasted Reform.....	446
Railroad Economy.....	446
Des Jardins Suspension Bridge.....	446
Buffalo & New York City R. R.....	447
Milwaukee & Mississippi R. R.....	447

#### RAILROADS.

Houston & Texas Central R. R.....	447
M. & C. R. R. Co.....	448
Northeastern R. R.....	449
The Remedy for Railway Abuses.....	451
Business of the Chicago, Iowa and Nebraska R. R.....	451
Michigan Southern—Resignation of the President.....	453
New York & Erie R. R.....	454
Michigan Southern R. R.....	454

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	452
Monetary and Commercial.....	453

ILLINOIS SOUTHERN R. R.—We would call the attention of contractors to the advertisement of this company in another column. The Illinois Southern Railroad is one of great importance, and its officers are pushing it forward with vigor. The charter was only obtained last winter, and the preliminary surveys are now made and proposals invited.

The Milwaukee and Horicon railroad was opened to Berlin, Wis., with appropriate ceremonies, on the 12th ult. An excursion train was run from Milwaukee to Berlin, where a celebration took place. The company have recently purchased several lake steamers to run on Fox and Wolf rivers in connection with this road.

### THE WAR UPON RAILROADS AND THE FUTURE.

A portion of the press and a large part of the people have been engaged in a random, but fierce attack upon railroads. They have not attacked them as machines useful to society, nor as a power superior to all other powers in locomotion, nor as a great gain to the interests of commerce; but they have attacked their financial ability; they have warred upon bondholders and stockholders; they have endeavored to take away their good name, and to deprive thousands of good and honest men, who aided railroads for the purpose of aiding the country, of the property they have invested in the roads. We hesitate not to say that if the same effort had been made to sustain the credit of railroads which has been made to depreciate and destroy their credit, no incorporated stock in the country would have stood better than the better class of railroads. We do not mean to say that there are not weak and badly conducted railroad companies. We simply mean that companies which have good lines and are honestly conducted should have commanded the highest prices current for any stock whatever. Take for example the New York Central. Last week it stood at 74. But the N. Y. Central has at all times made large profits, and cannot fail to do so. It lies alongside the great Erie Canal, which it was supposed impossible to conquer, and yet it has been conquered. The business of the Erie Canal is not equal to what it was ten years ago, and it is never likely to be equal to what it is now. On the other hand, the business of the railroad is increasing at a prodigious rate.

We say, then, let no one be discouraged. Let every bondholder and stockholder who can hold on. Let the stock gamblers fight out their day, and the newspaper prophets vaticinate evil as long as they please. They will have their day; but the day of financial as well as commercial triumph for railroads is coming, and is near. For this there are strong reasons. Let us enumerate two or three:

1. Railroads on great routes have completely triumphed over all competition which at first stood in their way. The Reading Road triumphed over the Schuylkill Canal. The Baltimore Road broke down the Chesapeake Canal. The Central N. Y. Road is rapidly breaking down the Erie Canal. New York has just expended twelve millions on the canal, which might just as well have been sunk in the Red Sea. The Ohio railroads are fast killing the canals, and soon there will be no competition against railroads whatever. Even rivers must give way. A railroad on the bank of the Ohio would even now take all the freight from the river which it could carry. The grand manifestation of the power and superiority of steam is now on railroads. A writer in Hunt's Magazine says:

"I hold, as self-evident, that railways now

make cities—not water courses. They do business all the year, and it is now the settled will of the people to use them for certainty and celerity, cost what it may. Chicago, with her railways, is the central point of the great plain between our lakes, the valley of the Mississippi, and the Rocky Mountains, and now the greatest receiving city of grain and its distribution in the world."

This is true, and in the West railroads control all the business of transit lines. In a few years Cincinnati will be the greatest center of internal commerce in the world.

2. But it is not true that railroads—finished railroads—have been unproductive. We insert the following table of dividends *actually made* of railroads, which happens just now to be before us:

	Per cent.
Little Miami R. R.....	10
Hamilton & Dayton.....	8
Indianapolis & Cincinnati.....	8
Michigan Central.....	10
Boston & Providence.....	6
Boston & Worcester.....	7
Pittsburg.....	6
Old Colony.....	6
Taunton.....	8
Western (Mass.).....	8

Here are ten railroads, North and East, whose dividends average about 8 per cent., and there are a hundred others in the country which do the same. It is a false idea, then, to say that railroad stocks, in the aggregate, are not profitable. They are profitable, and quite profitable.

3. But, again, railroads have been tested superficially before the public in regard to expense and profit. Two years ago half the railroads now in use were not fully equipped and adapted to business. One year ago there was a very poor business; and because, in these two years, all the roads of the country have not realized the profits anticipated, they are immediately denounced as unprofitable concerns, which must immediately go into bankruptcy. Such is the flimsy logic and malicious prophecies of the New York Herald, an unprincipled press which alike slanders the railroads and deludes the public. But now we have come upon a year of unprecedented crops, and the railroads will find full employment for all their power, and earn good dividends. This will not wholly appear, however, till next year. Then what will the prophets of evil say? Why they will prophesy nothing but good. The railroads will be praised as money making machines, and stockholders be advised of high prices! Such will be either the folly or the hypocrisy of those who now denounce railroads.

Such are some of the reasons which should induce those who can see the intrinsic merits of railroads, and who disregard the outcry of panic-makers and the delusions of the ignorant.

There is every present prospect that the future of American railroads will be bright. The dishonest managers, the floating debt, the necessary finishings, will soon be closed up, and the roads left to show what they really



can do. It will then be a question of *merit* only; and we shall continue to believe that on their merits railroads will be found superior to any other commercial agency, and as such be profitable.

#### THE ATLANTIC TELEGRAPHIC CABLE.

The great event of the age, the laying of the Atlantic Telegraphic Cable to connect Europe with America, has proved a failure in its first attempt. The disappointment is a severe one to the stockholders in the company, as every precaution had been taken to render a failure impossible. The following is the account of the disaster taken from the *London News*:

"From Valentia harbor the great ships set forth, the American frigate Niagara having the task assigned her of 'paying out' the first portion of the cable. She was waited on through the ocean by the *Susquehanna*. The famous *Agamemnon*, her partner in the great enterprise, was attended in like manner by the *Cyclops* and the *Leopard*. The first start was an unlucky one; a fracture took place at the distance of less than four miles from the Irish shore. The damage thus occasioned was speedily repaired, and the five vessels again, on Saturday, the 8th of August, steamed out into the Atlantic. Till the Monday following all went on prosperously. The weather was favorable, the machinery worked admirably, a depth of 2,000 fathoms had been reached, and some 300 miles of distance. The telegraphic communications with Valentia were kept up without interruption. On the Monday evening a heavy swell set in and a powerful under-current was experienced. This increased through the night of Monday and the early morning of Tuesday. At about 3½ o'clock on the Tuesday morning, it was found that although the vessel was only making some three or four knots an hour the cable was paying out five, six, and sometimes seven knots. At this rate it was obvious that the quantity of wire on board would be exhausted before the Newfoundland shore was reached. It became necessary to tighten the strain on the cable, and this was accordingly done till the pressure reached 3,000 pounds. This was at 3¾ o'clock on the Tuesday morning. There was a heavy swell running at the moment that the full increased power was thus put on the break; the stern of the *Niagara* was low down in the trough of the sea; as she rose on the back of the waves the extra strain thus occasioned was more than the strength of the cable could bear; it gave way under the pressure, and, parting at some distance from the ship's stern, it sank down like lead through the mighty waters on that portion of the telegraphic plateau between Ireland and Newfoundland where the Atlantic reaches its maximum depth of not less than 2,000 fathoms. At the time of the severance the *Niagara* had made from 260 to 280 miles in a direct course from Valentia harbor, and the length of cable that had been let go was about 380 miles."

The experience thus bought in this great experiment, though a dear one, will probably lead to the ultimate success of this important enterprise. The cable weighed one ton to a mile, and could bear a direct strain of four tons upon its strands. When, however, it

was immersed in the sea, its relative weight was diminished, and its downward pressure on the salt water was a little under fourteen hundred weight per mile. The greatest depth over which the vessels would have to pass, in depositing the cable, was a little more than two miles, and this depth was reached at the time that the cable broke; consequently, if enough of the rope were suffered to hang motionless from one of the vessels to reach the bottom in this depth, the strain to be borne by the cable would be one ton and a half. According to the arrangements, however, for the paying out, the cable would be constantly in motion, with only a sufficient restraining power upon it to control and regulate its passing from the *Niagara* until this was increased by a rate slightly faster than the progress of the vessel. The cable, however, would not descend to the bottom in a vertical line from the vessel, but in a line deviating from the perpendicular in proportion to the speed of the vessel and the rapidity with which the cable sank in the water. This would give a distance of from five to six miles hanging suspended from the end of the vessel. This again would be greatly increased by the under-current, which would carry the cable out in the shape of a bow, more or less arched according to the velocity of the current. The cable, therefore, must have been constantly stretched almost to its full strength of four tons from the time the vessel began to move in anything like deep water, and was poorly prepared to meet any additional incidental strain from the heaving of the waves. We should consider a cable capable of sustaining at least ten tons quite light enough to attempt to lay down in the deep waters of the Atlantic.

Another consideration suggested by the failure of this attempt is this: The directness of the line in which the cable would fall on the bottom of the ocean would depend very much on the rapidity with which it sank and the velocity of the currents. It would, therefore, seem desirable that the cable should sink as rapidly as possible, and when sunk should not depend on mere accident to insure its permanency of position. A very gentle current—one hardly perceptible—operating on two thousand miles of cable would produce an enormous strain; and that this had begun to have some effect was evident in the fact that the cable was dragged out from the vessel at the rate of 5, 6 and 7 miles per hour, when the vessel was moving at the rate of but 3 or 4. This would, therefore, show the importance of adopting some means of anchoring the cable at the bottom of the ocean; so that when it had once reached its destination it would stay there despite of the constant action of the currents, which there is reason to believe would influence it.

This great experiment will of course be

tried again; perhaps in the coming month of October, but more probably next August. But, to insure its success, we believe that a stronger cable, with some sure means of anchorage, and a surplus equal to the length to be laid, should be provided.

#### THE ERIE R. R. AND ITS BOASTED REFORM.

The *Twenty-five Thousand Dollar* President of the Erie Railroad has made a great flourish of trumpets over the reforms that he is going to introduce in the management of his railroad. He announced, in his circular to the railroads of the country, his determination to cast off all extravagances (except himself), to reduce expenses and increase receipts.—Among his other reforms, he includes, of course, the cutting off of free passes, and has directed the conductors not to receive even those previously issued. There have been many attempts made to reduce the evil of free passes, but we never before heard of dishonoring passes already given. It has remained for Mr. Moran to inaugurate this extravaganza of reform, and try an experiment never before tried in the history of railroading. For ourselves, we are not hit, as we have no pass over this road, and have no desire to obtain one. When we travel we want to trust ourselves to a road where both track and machinery are well sustained, and where the attention of the officers is more employed in doing their own duty well than in hatching up extravagant notions and would-be reforms, designed only for effect in the gambling operations of Wall street.

**RAILROAD ECONOMY.**—We give, in another column, a sensible article from the *London Times* on this subject. The grounds taken in this article are the same in principle as the *Record* has constantly advocated, and without which railroad investment cannot be permanently safe. The *Times* contends that no property will be well unless under the immediate supervision of its owners; and that stockholders, who are the owners of railroads, must take sufficient interest in them to see to their affairs, or they cannot be well managed. The possession of absolute power by the officers of railroads is too great a temptation, unless it is guarded by strict accountability to the stockholders at stated meetings. We would commend the article from the *Times* to the perusal of our readers.

**DES JARDINES SUSPENSION BRIDGE.**—The suspension bridge at Des Jardines, just above the railroad bridge which was the seat of the fearful accident last winter, fell during a severe thunder storm recently.

Suspension bridges are very uncertain affairs. They are peculiarly liable to accident from wind and storm. And they give no warning of the moment when they may be expected to fall.



**BUFFALO & N. Y. CITY R. R.**—At a meeting of the first bondholders of the Buffalo & New York City Railroad Company, held August 27, 1857, at the call of the Trustees, the following resolutions were unanimously adopted:

Resolved, In the language of the Board of Directors of the Buffalo & New York City Railroad Co., published in 1851:

"The present line of railroad from Buffalo to Hornellsville forms the best and shortest connection between Buffalo and New York city.

"That it was adopted upon mature consideration, and after four distinct routes had been carefully surveyed and their merits considered."

Resolved, That in the judgment of the Buffalo & New York City bondholders (secured by mortgage between Hornellsville and Attica):

The Buffalo & New York City Railroad Co. first mortgage bondholders, whether secured by a mortgage between Buffalo and Attica, or by mortgage between Attica and Hornellsville, will best promote their interests by acting together, so as to bring the entire line to a sale, under the expected decree of the Court, as also by the purchase of the entire line for the benefit of the bondholders.

And we invite a full and impartial investigation into the elements that make up that community of interest between the bondholders on each section of the road.

#### MILWAUKEE & MISSISSIPPI RAIL ROAD.

The president of this road has written a letter refuting some charges made against the Company in Wall Street, to affect the standing of its stock, and in conclusion thus sums up the position of the Company:

Having replied to the items in detail, I now add that before the close of this year, unless the pressure of business upon the road shall delay it, the Company will have completed its main line to Prairie du Chien, 192 miles; and its Southern Wisconsin line to Monroe, 44 miles, an aggregate distance of 236 miles, for less than \$7,200,000, which sum I can now state, from the near completion of the entire work, will cover all the expenditures of every name and nature connected with the building, and furnish the 236 miles of road, which is less, too, than the same number of miles, equally well constructed, have ever heretofore been built in the West. If it be necessary to increase that sum hereafter, it will be for additional equipments and additional facilities to do the increasing business.

This sum will be represented by \$3,400,000 of stock, the bonds of the Company, \$3,700,000, \$122,000 paid by sinking fund, and the residue by so much of the floating debt as may remain unliquidated at the close of the fiscal year.

To provide for the interest on the bonds will require..... \$292,000  
Sinking fund..... 53,500  
Ten per cent dividends on the stock.. 340,000

Total..... \$675,500

To accomplish the above result and allow 45 per cent for running expenses, (which will cover also the wear and tear and depreciation for some time to come, owing to the chapsness with which wood can be purchased, which is one of the largest items in the running expense account,) will require that the gross amount earned in one year shall be \$1,225,000, which, taking, as a standard what the Company has earned per month from May 1, when the road was said to have been in operation to Prairie du Chien, and making no allowance for an increase from the completion of the Southern Wisconsin line, although its cost is included in the sum stated, nor from the completion of the Detroit and Milwaukee railroad, will undoubtedly be earned.

## Railroads.

### HOUSTON & TEXAS CENTRAL R. R.—FOURTH ANNUAL REPORT.

"In compliance with the charter, the President and Directors herewith submit their Annual Report:

At the date of our last meeting we were busily engaged constructing the first division of twenty-five miles, which the law required should be completed by the first of August, 1856.

In the early part of February of that year, Messrs. J. W. Burke & Co. notified the company of their inability to comply with their contract. But little time was left to complete the work in order to secure the land bonus which the State had so liberally granted, which was then placed in jeopardy by the failure of Messrs. J. W. Burke & Co.

No time was lost in soliciting proposals, and the work was awarded to Messrs. Stamps & Noble, but at a heavy loss to the company on what the said work would have cost had the terms of the contract with J. W. Burke & Co. been complied with on their part.

The manner with which Messrs. Stamps & Noble executed their trust in the brief period of time left to save the land bonus, entitle them to the warmest thanks of the stockholders.

These gentlemen succeeded in getting the first twenty-five miles of iron down on the 27th day of July last, since which time the cars have made daily trips to Cypress City.

In order to secure a loan from the School Fund, the company concluded a contract for the completion of the second section upon favorable terms, and already the second twenty-five miles section is graded. The bridges, culverts and ties are all in a state of forwardness, and a strong force is busily engaged in laying the iron. We look with confidence for a completion of the work to the town of Hempstead in time to carry to market the growing crop. Thirty-five miles of iron have been laid, and the trains are daily running over the same; thus reducing the distance by stage to Austin to 135 miles, by almost an air-line.

The engineers have just completed the leveling of the third section, which carries us over the most difficult ground encountered, probably, to the terminus of our road.

Several large bridges and considerable trestle-work are required through the Navisota Bottom. The engineers have made, since our last report, a reconnoissance of a portion of the line beyond the Navisota, and are now engaged locating and leveling the fourth, fifth and sixth divisions; and, at as early a day as practicable, will place the same under contract.

The State Engineer has made an examination of the first division, and his report is

highly flattering to the company, and under which the Commissioner of Claims has issued to the company four hundred certificates, for six hundred and forty acres each, making two hundred and fifty-six thousand acres, secured them by completing this division.

The Board have taken early steps to locate the same, and, with that view, placed them in the hands of L. P. Rucker, Esq., a gentleman in every way well qualified for the task. An efficient agent of the company attends him who will select the land to be surveyed, and make a topographical and geological report of the country. These lands will be located in what is termed the Pan Handle country, in Cooke District, and said to be one of the richest and most valuable portions of the State, possessing the finest soil, large bodies of cedar, post-oak, and other timber, abundance of fine water, building and lime rock, &c.

The business prospects of our company are highly flattering. Lines in every direction are radiating from this center. Within the past year the city of Houston, in her corporate capacity, has built a tap road connecting this point with the Buffalo Bayou, Brazos & Colorado Road, which is now being successfully operated a distance of thirty-two miles, to the town of Richmond, on the Brazos. This road is being extended toward Columbus, in the direction of San Antonio, while measures are being taken to extend the Houston Tap Road to Columbia, on the Lower Brazos.

The citizens of Washington county, with commendable zeal, are actively engaged in organizing and surveying a road from Brenham to intersect our line—its length less than twenty miles. This road, when completed, will place us within eighty miles of the city of Austin. There is no doubt that the counties of Washington, Fayette, Bastrop, Burleson, Travis and Williamson, will carry this road through the Yegua valley, direct to Austin, offering, as it does, a most practicable line, affording abundant timber, water, &c. This line offers an easy grade, and can be laid in an air-line, running within 18 miles of LaGrange and 11 of Bastrop, shortening the distance to Austin to little less than one hundred and fifty miles to this city. A road has been recently projected and surveyed from this city, via Liberty, Beaumont and Madison, on the Sabine—a distance of ninety-nine miles—connecting with the N. O. & Opelousas Road at New Iberia, within 115 miles; from thence to Berwick, 44½ miles; thus forming a direct communication with New Orleans, 80 miles of which the cars are now running over. Arrangements are being perfected to place this work under contract. The iron and rolling stock are already secured for the whole line through an extensive European house. The whole distance being but 338½ miles—80 of which, as stated above, being







## NORTHEASTERN R. R.—REPORT OF THE PRESIDENT.

To the Stockholders of the Northeastern R. R. Co.:

GENTLEMEN:—I have the honor of submitting the following Annual Statement of our affairs:

The accompanying statement of C. Williams, Jr., Esq., Secretary and Treasurer, shows that the subscriptions to the capital stock amount to.....\$564,650 00  
Of which there has been received.....\$26,315 37

Leaving due.....\$38,334 63  
Of this there is due by the State of South Carolina, upon completion of the road.....\$30,000 00  
By individuals, in the process of collection.....18,334 63  
38,334 63

We have received from  
Installments on stock, in notes and cash....\$926,315 27  
Net proceeds of the sale of 505 bonds of company.....233,588 55  
From notes to banks and individuals, secured by bonds.....257,300 89  
From bonds given in part payment for real estate.....41,890 00  
Balance at credit of transportation account..\$0,247 93  
\$1,379,272 74

We have expended in construction—  
Real estate, property, &c.....\$1,333,313 34  
Interest on loans, discounts on sales of stock received from the city and State, and interest on bonds issued.....28,117 16  
1,361,430 50

Balance.....\$17,842 24  
On hand—Notes secured by collateral.....\$8,036 12  
Stock in Cheraw & Darlington Railroad.....5,930 00  
Cash.....3,876 12  
\$17,842 24

For full particulars connected with the progress of the road, and the work yet required for its completion, we refer you to the accompanying report and statements of the Engineer and General Superintendent, S. S. Solomons, Esq. The tables A, B and C will furnish the amount received from passengers, freight and other sources, the number of passengers conveyed between stations, and the property of the company in rolling machinery, &c., &c.

At our last meeting the opinion was expressed to you that if the requisite funds were provided the terminus of the road would be reached by the 1st of April, 1857, and such we had confidently hoped would have been the case; but difficulties have interposed, some of which are alluded to in the report of Engineer, which have prevented this result. Independently of these, your Board has adhered to the policy indicated in their last report, viz: "To build the road as the means are provided, and not in anticipation of receipts, the failure of which might impair the credit of the company, or affect the integrity of their contracts." The want of adequate means to conduct our operations with the rapidity which was desirable, has been severely felt. It must be borne in mind that the work was commenced, has been continued, and we are endeavoring to complete it, upon a subscription scarcely equal to one-half the cost. The available portion of this having long since been exhausted, our only resources for the prosecution of the work have been from the sales of our bonds, and such aid as several of our city banks were willing to extend to us. To force off the former at a heavy sacrifice seemed injudicious to your Board, while we were necessarily compelled to restrict our demands upon the latter as far as possible. For the assistance which they have thus afforded us, an expression of our thanks are due. You will find in the report of the Engineer full

details of the work yet to be finished. It will be seen that the grading, bridging, and trestle-work remaining to be done on the entire line can be completed, while the continuous laying of the track progresses towards the terminus; and if the pecuniary circumstances of the company will only admit of their meeting the cash outlay for the iron and the expense of transporting to Florence, that we may shortly commence laying the track from that point towards the river, the entire road can be open for the business of the ensuing fall. I would respectfully urge that every effort be made to carry out this course.

We have rails now here sufficient to extend the road 77 miles from the city; and to complete it about 2,100 tons more will be wanted, 600 of which are now on the way.

Notwithstanding the difficulties which have been encountered in sinking and permanently securing the iron piers of the bridge across the Santee, we have no apprehension as to the practicability of the mode adopted, and, should circumstances prove favorable for the continuance of our operations at that point, this structure will be ready for the passage of the trains in a few months.

Since the opening of our road, now nearly two years, our trains have been running without interruption, and without the occurrence of any accident until the 21st ultimo, when, from some cause not apparent, a passenger and freight car were thrown from the track and considerably damaged. We are pleased to add, however, that no one was injured.

On the night of the 21st ultimo a small house at Gourdin's Turn Out, used temporarily for the storage of freight taken to that point, was destroyed by fire, with a large portion of its contents. It is supposed that the building was entered for the purpose of theft, and that the fire was the result of a spark, accidentally dropped from the light used. We have not yet been able to ascertain the amount of property destroyed, but it cannot be large.

The period for the completion of our road is now so near at hand, and when its advantages will be subjected to the test of experience, that we deem it unnecessary to submit speculations of its probable income; sufficient to say that from carefully prepared estimates we are authorized in believing that the gross receipts will reach \$250,000 the first year after completion.

Our southern connection, the Charleston & Savannah Railroad, having received at the last session of our Legislature important State aid, its completion may be regarded as beyond all doubt. Our northern connection, the Cheraw & Darlington Railroad, is already finished to its point of junction, and passing over it, we may at no distant period anticipate a connection with the Cheraw & Coal Fields Railroad, which was chartered at the late session of the North Carolina Legislature. The construction of the latter road, rendering Charleston an outlet for a portion of the coal and mineral products of North Carolina, is of vital importance to us, and demands your consideration.

Before closing this report the President desires to return his sincere thanks to the Board and to the stockholders, for the continued confidence and many acts of kindness and cordial support he has received at their hands. He now requests to be released from his responsibility, and to resign their affairs to able hands. To the officers of the company associated with him he is greatly indebted for a

uniform attention and faithfulness in the discharge of their duties. Respectfully submitted.  
T. PINCKNEY HUGER, Pres't.

April 1st, 1857.

## ENGINEER'S REPORT.

ENGINEER'S OFFICE, NORTHEASTERN R. R.,  
CHARLESTON, March 10, 1857.  
T. Pinckney Huger, Esq., President, &c.:

SIR: I have the honor to submit the following Report of the present condition and prospects of the work committed to my charge as Engineer of construction, as also various statements relating to the operations of the finished portions of the road during the year ending February 28, 1857:

According to the Treasurer's books there has been a total expenditure of.....\$1,373,527  
To which will be added, to complete and equip the road.....447,000

Making the total cost of road and equipment, upon completion, amount to.....\$1,820,527

Included in the amount taken from the Treasurer's books is the sum of \$152,746, charged to discount, real estate, right of way, and property, which, although properly elements in the cost of the road, could not have been originally estimated for, and, as far as it goes, accounts for the excess of expenditure over and above that estimate.

The equipment provided for in the above estimate consists of 4 passenger and 2 freight engines, 3 first class and 2 second class passenger cars, 3 mail and baggage, and 36 box freight cars, in addition to our present stock.

A less liberal outlay for the department will conflict with a proper discharge of the duty which I imagine the road will be required to perform. I may here be permitted to suggest that preparations for increased business are most generally delayed too long: as a consequence, much embarrassment ensues and greater expenses are incurred, both of which would have been avoided by a little forecast. A want of timely preparation on this road for the business which must be thrown upon it, coming, as it will, not by degrees, but in a day, would be attended with still greater evil than embarrassment and expense, namely: a diversion of trade and travel to other and rival routes, and a loss of confidence which it would take years to restore.

I have not inserted the cost of workshops, as it is contemplated to use temporary structures for repairs of engines until the company's means will permit the erection of suitable buildings, and the judicious location and arrangement of the same. But, at the same time, it is proper to state that a wise economy points to their early establishment as of material importance.

GRADING.—Starting from the point at which the track-layers are now putting down the iron, the grading, with the exception of about one-third of a mile, is finished continuously and ready for the superstructure to within 12½ miles of Florence (our upper terminus), say 90 miles from Charleston. Within this 12½ miles there remains about 70,000 cubic yards of earth to remove, 50,000 of which are on the sections adjacent to Lynch's Creek, the remaining 20,000 being distributed over the 9 miles immediately south of Florence. The present grading force on the line could complete the whole of this work within 70 days.

BRIDGES AND TRESTLE-WORK.—Under this head stands first in importance the Santee bridge and its foundations. This work, which has so greatly disappointed our own and public expectation as to the time of its completion, is still unfinished, owing to the various acci-



dents, delays and freshets, to which its progress has been subjected. With these you are familiar—they met the work upon the threshold and have up to this moment unremittently pursued it. The bridge was framed, the scaffolding hauled up, and everything prepared, only waiting a favorable stage of the water for its erection, when, on the 23d of December one of the Columbia steamers, on her way down, struck and prostrated one of the piers. Since then, and until within the past few weeks, continued freshets in the river had prevented the recovery of the fallen columns, and the consequent continuance of the work. We have now these columns erect, one uninjured, the other so much damaged as to require a very material portion of it duplicated. The loss is trifling, except in the time which will be required to replace the injured parts. Profiting by the experience afforded by our past difficulties, means will be adopted to place the work beyond the reach of future accidents. With the present arrangement for transporting iron across the river, the work of track-laying can proceed uninterruptedly, the absence of the bridge opposing no obstacle to its rapid progress. A glance at the freight and passenger business transacted between Charleston and "Gourdin's," the first station north of the Santee river, will show whether the income of the road is affected by it. Thus, while every effort is being made to effect a passage for the train across the river, our other work is going on with satisfactory expedition.

There remains of unfinished trestle-work, at various points upon the line, 4,700 feet, the timber for which has been delivered at the places where it will be required, and an efficient force engaged in its construction. The severity of the month of January, followed by freshets in the streams to be crossed, somewhat retarded the progress of this work, but it is sufficiently advanced to remove any apprehension of delay to the track.

**TRACK-LAYING.**—At the date of the last Annual Report made by my predecessor, the trains were running to Monk's Corner, 29½ miles from Charleston. Since then the progress of the track has been marked by the opening of the road for business to "Bonneau's," 38 miles, on the 1st of August; to "St. Stephen's," 45 miles, on the 1st of September; and to Santee River, 48¼ miles, on the 20th of November. Upon the arrival at this point the want of the bridge stopped its progress. The advanced state of the work for this structure, however, led to the belief that but a trifling check would be encountered when the accident above referred to occurred. In view of the delay which now seemed to threaten the whole work north of the Santee, and to guard against the same, the scheme of putting a locomotive across the river suggested itself. To attain this object without interference with the business and road demands upon our stock of machinery, already limited and somewhat crippled, recourse was had to the purchase of a 16 ton engine (the "Thomas Bennett") from the South Carolina Railroad, and on the 6th of February this engine was safely landed on the trestle-work on the Williamsburg side of the river. The track-laying was at once resumed, and at this time the engine is running over 7 miles of road beyond the Santee—say 56 miles from Charleston. The cross-ties are distributed for 10 miles consecutively, ahead of the present terminus of the rails; and, with an adequate gang of hands getting them out, a fair

prospect is afforded us of accomplishing an average of 6 miles a month.

From this rate of progress (which will scarcely be exceeded when the Santee is bridged) it will be readily seen that if the remaining 46 miles be laid continuously from Charleston, the passage of a train through to Florence may be expected about the 1st of November. But if it be deemed desirable (which should be taken for granted) to complete the road earlier at a trifling additional cost, double the above number of miles of road (say 12 miles per month) can be brought into use by starting another gang of track-layers at our upper terminus and working towards Charleston. This course would insure the completion by, at farthest, the 1st of September, and secure both the up and down freight business and the stream of returning fall travel. I feel no hesitation in recommending the adoption of this latter course, confident that the profits to be derived from the business of the months of September and October, which would in that case be thrown upon the road, would far more than counterbalance the additional cost which would be incurred by shipping from Wilmington, N. C., to Florence—the only material element of extra cost. I need scarcely allude to the addition which the interest for two months on the large capital already invested would make to the cost of the road. The importance of this consideration cannot have failed to impress you.

During the year an average of 36 miles of road have been in operation, the gross receipts from the business of which amount to \$32,344 45. No accurate record of the expense incurred in conducting this business could be kept while the work of construction was going on; but, inasmuch as such a record could afford neither a criterion of economical management, nor serve to guide an estimate of future profits, its absence is a matter of no consequence.

The accompanying statement marked A will show the monthly receipts from all sources, and the quantities of the leading articles of freight brought to Charleston during the year.

Statement B will exhibit the number of passengers carried to and from Charleston to each station of the road, and number carried between way stations.

Statement C details the motive and car power of the company.

The track, although not in perfect order, has been greatly improved since the last annual report. The settlement of the embankments, in many places, has ceased, and as the work of ballasting continues it is reasonable to hope that the difficulty encountered from the unfavorable character of the earth upon which the track is laid will be, to a great extent, overcome.

I have to recommend the employment of an engine and train of cars to substitute embankment for much of the trestle-work within the 15 miles next the city, a greater portion of which, I imagine, was erected more on account of the want of convenient material for making the embankments than from a fear of cramping the water way. Although, upon the whole, this work is as safe as such structures usually are, still I think the expense and effort required to "make it answer for the present," would be more wisely expended in substituting permanent embankments for the perishable trestle before the necessity for removal manifests itself. This suggestion ac-

quires additional force in view of the moral responsibility which a due regard for the safety and security of human life imposes upon us.

Our motive and car power is in good condition, and, considering our inadequate facilities for repairs, speaks well for our master machinist, Mr. Chalk, and the men in his department.

The regularity with which the trains have performed their trips, and the entire freedom from mishap during the year, will not have escaped your observation. Before the close of the present year we will have joined rails with the Wilmington and Manchester Railroad, when, in obedience to the requirements of the community, a double daily mail service will be exacted of us. We will also have made the connection with the Cheraw & Darlington Railroad, whence will be opened to us the large and lucrative freight traffic properly belonging to that road, together with the business of its rich tributary counties in North Carolina, a portion of which is now conducted via Columbia and the Charlotte Railroad. In addition to this we will (with positive certainty) be required to furnish the transportation for nine-tenths of the freight for the Wilmington & Manchester Road, now passing by a circuitous route over the South Carolina Road, as well as for much of that which has, up to this time, been forced out of its legitimate channel to Wilmington, N. C. I say nothing of the way-business to be derived from the hitherto land-locked region bordering on our own line. In view of the magnitude of the traffic afforded by this prospect—a state of things we will realize the day after our line is completed—it may not be amiss in me to call your attention to the necessity which exists—nay, the duty enjoined upon the managers of the road, to provide, in time, the accommodations to meet it with promptness and efficiency.

For the information of the Board I will state that, with the present arrangement of the schedule of our northern connections, the passengers who now reach Charleston by the 2 o'clock P. M. train of the South Carolina Railroad will, when our road is finished, arrive in the city at 8 A. M., and those going North, instead of leaving at 10 A. M., as now, will take the Northeastern cars at 4 P. M. The same difference will occur in the arrival and departure of our second train. Thus, in place of the present arrival at 3 A. M., our cars will be due here at 8 P. M., and leave at 5 A. M., instead of 10 P. M., as per South Carolina Railroad schedule.

To the mercantile community this change, equivalent as it is to the saving of a whole business day, will be an appreciable benefit.

Respectfully submitted, by

S. S. SOLOMONS,  
Eng'r and Sup't.

March 10, 1857.

## TREASURER'S STATEMENT

OF THE AFFAIRS OF THE NORTHEASTERN  
RAILROAD COMPANY ON 28TH FEB'Y, 1857.

### EXPENDITURES.

For construction.....	\$811,430 56
For iron.....	396,756 39
For expenses, salaries, &c.....	52,899 32
For engineering.....	42,945 68
For real estate.....	74,504 97
For right of way.....	45,350 46
For property, machinery, &c.....	108,780 89
For interest.....	28,117 16
For transportation expenses.....	12,096 52
For sundry open accounts.....	654 07



## ON HAND.

Notes secured by collaterals.....	\$8,036 12
Stock in Cheraw & Darlington R. R.	5,930 00
Cash.....	3,876 12
	17,842 24
	\$1,391,569 26

## RECEIPTS.

From bonds given by the company in part payment for real estate.....	\$ 41,800 00
From installments on stock, in cash, notes, &c.....	826,315 37
From net proceeds of 505 bonds issued to date.....	233,588 55
From notes to banks and individuals.....	257,300 89
From gross transportation of freight and passengers from 1st March, 1856.....	32,344 45
	\$1,391,569 26

## SUBSCRIPTIONS TO THE CAPITAL STOCK OF THE COMPANY.

Shares.	
By City of Charleston.....	8,000..... \$400,000 00
By State of South Carolina.....	4,400..... 220,000 00
By Banks of City.....	1,600..... 80,000 00
By Individuals.....	3,293..... 164,650 00
	17,293..... \$864,650 00
Received from City.....	\$400,000 00
" " State.....	200,000 00
" " Banks.....	80,000 00
" " Individuals.....	146,315 37
Due by State.....	20,000 00
Due by Individuals.....	18,334 63
	\$864,650 00

## THE REMEDY FOR RAILWAY ABUSES—THE GREAT WESTERN RECORD.

From the London Times, August 17th, 1857.

Times were when it was reckoned a useful work to draw a picture of a "Patriot King;" it is now the day of the "Patriot Shareholder." Since the publication of that sketch or treatise the aspect of human affairs has changed. Railway responsibilities have taken the place of dynastic disputes. We have very serious doubts if personal attachment to such a worthless Sovereign as the Second JAMES would now seriously disquiet the equanimity of the Empire for ten days. It becomes, however, a more serious matter when the dividend upon the stock of a particular railway, which estimates by millions sterling, drops from 8 per cent. to 1 per cent. Such has been the case of the Great Western Railway; but, surprising as is this result, it is still more surprising that the shareholders of the Company should be of opinion that the gentlemen under whose auspices such a result has been produced are worthy of honor and reward. Doubtless the instance of that old General who was thanked by the Parliamentary majority of those days for not having given way to despair when he had just been signally defeated was present in the minds of the Great Western shareholders, when, at Bristol on Friday last, they voted for the renewed employment and additional reward of Messrs. BRUNEL & SAUNDERS. We, of course, who are not Great Western shareholders, but who simply represent the public and the passengers by the line, would appear at first sight to have nothing to do with the matter beyond that of sounding a trumpet in honor of those illustrious citizens. A moment's consideration, however, will show that the interests of passengers by the line, and of the public generally, are inextricably bound up with the correct management of railway undertakings. Not only are our interests directly involved in the matter, but we have an absolute right to be heard, in as much as a virtual monopoly of the traffic throughout the district occupied by any railway company has been handed over to them by the Parliament, which represents the community. It is not as in the old coaching days, when every

coach proprietor was heartily welcome to ruin himself, if such was his own pleasure. There were the turnpike roads open to all alike. Half a dozen rival concerns were at any time to be found running their vehicles along the main roads, and the public had no more right to interfere with their proceedings than to intervene in the disputes between antagonist haberdashers. Not so in the case of railway mismanagement. It would undoubtedly be right to put a limit to the gain of these great monopolists, if by any unexpected revolution in their affairs it became clear that they were making undue profits by surcharging the public. Now, as consequences almost equally unpleasant result from the reduction of their profits when such reduction is due to over-expenditure and general mismanagement, it would seem to follow that we have at least the right of remonstrance. We do not desire to send a tribune as plenipotentiary for the public to the meetings of the shareholders, or to influence their decisions in any more direct way than by the action of public opinion; but so far we are clearly justified. The other day we showed how the interests of the unfortunate shareholders not directly concerned with the management had been damaged by the rash and unadvised policy of the Chairman and Directors of the Great Western Company; we now assert that, equally in point of principle, although it may be to a less degree in amount, the interests of the public—at least of all persons who use the line—are injured by a result which is expressed by the dividend of 1 per cent. \* \* \*

Nor are the shareholders entirely free from blame in this matter. We understand well the difficulties of their position, and can thoroughly appreciate the fact, that any individual member of a body, nominally paramount, may be in point of fact quite powerless, when he endeavors to act against an organization which is at least strong enough at any time to crush him. The whole history of railways in this country is a mere record of the inefficiency of the proprietary bodies. Why should this be, for in this country also we find the great fact that the executive Government is kept substantially under the control of a Parliamentary majority? The real cause—at least one of the principal causes—is, that the Directors and proprietors are so seldom brought face to face, and when they do meet it is for so short a period, that no private proprietor has either time or opportunity to gain the ear of the assembly. There is no "Opposition." If any man is bold enough to challenge the proceedings of the Board, he is sneered down or bullied. All necessary measures have been taken for securing a favorable decision upon one side—no single measure has been taken on the other. Since the machinery of "audits" has confessedly turned out a mere delusion, and since railway companies will not brook any control from without, might not more frequent meetings between the Directors and their constituents be attended with beneficial effect? The shareholders who were really inclined to exercise a strenuous supervision over the proceedings of their executive officers before irreparable mischief was done would thus have an opportunity of becoming better acquainted with each other, and of ascertaining who among them was best qualified by natural aptitude and acquired habits of business for taking a lead against the Directors whenever they were inclined to go astray. Had the Treasury Bench—that is, the Board of Directors—of the Great Western been thus kept under the constant control of an

Opposition, it would have been most improbable that the dividend upon the line would ever have been reduced to 1 per cent., and we think it impossible that a sum of £5,000 should have been voted to the Secretary, who at least was a prominent officer of the Company throughout the proceedings which have resulted in so lamentable a depreciation of their property. Could we divest ourselves of the painful consciousness that many a head which was already low enough has been brought still lower by the policy which the Directors of this concern have too long pursued, we should be inclined rather to smile at their proceedings than to make them the subject of serious remark. Were not the interests of their co-proprietors and of the general public involved in their decisions, we know not why a patriotic body of men should not unite together for the praiseworthy object of presenting their country with a handsome railway constructed upon the broad-gauge principle, regardless of expense. As individuals, we rejoice to see foreigners at the Paddington Terminus, and enjoy their astonishment at the aspect of that magnificent shed. Unless their relatives and their heirs-at-law should interfere by commissions of lunacy or otherwise, we know not that strangers to the operation would have anything better to do than to subscribe for a testimonial to the patriotic citizens who devote the surplus of their property to carry out so stupendous an undertaking at their own proper cost. Under such circumstances, the erection of a statute to Mr. BRUNEL at one end of the line and Mr. SAUNDERS at the other, would be both intelligible and appropriate. We would suggest as an addition the erection of an obelisk at Paddington, inscribed in golden letters with the names of the virtuous citizens who had, from the purest and most disinterested motives, presented the nation with such a gift as the Great Western Railway!

CHICAGO, IOWA AND NEBRASKA RAILROAD.—For the purpose of showing the actual business of the Chicago, Iowa and Nebraska Railroad, we have taken some pains to procure the statements from the books of the company. After taking into consideration the fact of the road being completed but twenty miles, and that into a country comparatively new, we infer that the showing is one very flattering for its future prospects:

Statement of income of the Chicago, Iowa and Nebraska Railroad to July 1st—and from July 1st to August 1st. 1857	
Passengers to July 1st.....	\$1,325 59
Freight ".....	1,680 85
Ferry ".....	732 79
Total.....	3,749 23
Passengers for month of July.....	\$1,258 80
Freight.....	1,192 62
Ferry.....	463 60
Total.....	2,920 12
Total income.....	6,669 35
Statement of the amount of freight shipped west over the Chicago, Iowa and Nebraska Railroad during the month of July, 1857.	
Merchandise, lbs.....	263,271
Agricultural tools.....	48,614
Total number of pounds.....	311,885
Lumber in feet.....	388,944
Lath in bunches.....	716
Shingles, m.....	129

It is intended that by the commencement of the month of September, the road will be completed to Yankee Run a distance of forty miles from Clinton, at which time the business of the road must be largely increased. It will be seen by the above figures, that the business for July is nearly as much as for all the time preceding.—*Clinton Herald 15th ult.*



Amount of Loan.	Rate of Int'rst.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp'sr	.....	173	5,000,000.00	.....	.....	.....	none.
498,800	6			1862-3	2d "	.....	Androsco'g'n & Kennebec	.....	54.55	1,400,000.00	.....	209,475.46	110,246.98	4 pr. ct. 6m
199,060	7	July & Jan.		now	Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	8 pr. ct.
52,640	6			1860	"	.....	Eng'r, Old T. & Milford	.....	12.5	135,000.00	52,646.25	39,104.40	8,671.61	15,000 in '53
500,000	7		N. Y.	1866	1st mortgage.	.....	Boston & Worcester...	.....	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	160,000 4,6m
500,000	7			1857-9-62	Income.	.....	Buffalo & State Line...	.....	.....	1,300,000.00	.....	.....	.....	5 pr. ct. 6m.
301,000	7			1864	Domestic.	.....	"	.....	.....	.....	.....	.....	.....	.....
200,000	7			1872	4th mortgage.	.....	Central Ohio...	.....	43	1,872,800.00	1,001,087.00	105,200.00	77,700.00	10 per ct.
577,187	6			1874	1st mortgage.	.....	Champl'n & St. Lawr'nce	.....	.....	.....	.....	.....	.....	.....
192,200	7			.....	2d "	.....	Ch'r'l'te & South Carolina	.....	110	1,750,000.00	380,000.00	291,919.86	47 per ct.	\$72,300
380,000	7			.....	Domestic.	.....	Ch'go, Burl'ng'n & Quincy	.....	138	3,746,900.00	3,114,000.00	1,095,165.00	571,725.23	15 pr. ct. 6m
1,440,000	7		N. Y.	4-7	1st mortgage.	.....	"	.....	.....	.....	.....	.....	.....	.....
1,300,000	6-7-8			8-9	2d "	.....	"	.....	.....	.....	.....	.....	.....	.....
374,000	8			8-76	Convertible.	.....	"	.....	.....	.....	.....	.....	.....	.....
1,300,000				.....	1st mortgage.	.....	Chicago, Fulton & Iowa	.....	131	1,761,149.16	2,241,500.00	221,491.90	.....	.....
532,000				.....	2d "	.....	Cin. Wil'ng'n & Zanes'ville	.....	.....	.....	.....	.....	.....	.....
104,000				.....	3d "	.....	"	.....	.....	.....	.....	.....	.....	.....
305,500				.....	Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
540,000	6			.....	Convertible.	.....	"	.....	.....	.....	.....	.....	.....	.....
43,000				1873	1st mortgage.	.....	Cleveland Col. & Cin.	.....	139	4,741,220	.....	1 3,754	700,804	6 per cent.
400,000	7			1864	2d "	.....	Cleveland & Mahoning...	.....	85	1,500,000.00	.....	.....	.....	.....
0,000 0	7			1873	.....	.....	Cumherland Valley.....	.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line	.....	52	1,000,000.00	1,000,000.00	665,578.79	288,077.84	\$234,133
350,000	7			.....	1st mortgage.	.....	Eastern Railroad...	.....	93 6-10	3,345,900.00	.....	30,897.30	19,692.30	.....
740,000	7			1869	1st "	.....	East Ten. & Virginia...	.....	130	625,450.00	.....	.....	.....	.....
88,000	10			1861	2d "	.....	Essex Railroad...	.....	20	700,000.00	.....	.....	.....	.....
400,000	7			1864	1st mortgage.	.....	Evansville & Crawf'd'vle	.....	109	2,228,657.30	.....	243,970.42	136,061.90	\$133,281.45
200,000	10			.....	.....	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,540,000.00	.....	681,162.52	213,837.81	3 per cent.
100,000	6			.....	1st mortgage.	.....	Fox River Valley...	.....	33	800,000.00	.....	50,381.33	14,822.45	\$166,240.00
100,000	6			.....	1st "	.....	Fair Haven Branch...	.....	15	300,000.00	.....	1,068,292.59	337,689.42	\$166,240.00
300,000	6			1858	1st "	.....	Georgia R.R. &amp							



## MONETARY AND COMMERCIAL.

The events mentioned in our last continue to absorb the attention of commercial circles. The affairs of the Ohio Life Insurance & Trust Co. in New York are as mysterious as at our last dates. We have as yet seen no official statement of its liabilities and assets. The home concern has been industriously engaged in redeeming its liabilities by receiving checks on itself in payment for discounted notes. We noticed last week the suspension of several Wall street firms. A more important one took place during the present week: Messrs. Beebe & Co., specie and bullion dealers, who have hitherto been regarded as wealthy and safe men, have been compelled to suspend. This involved the Central Bank of this city, which yesterday closed its doors. Messrs. Atwood & Co., of New York, have also suspended.

The worst feature that we see in the present state of things is the deviation from commercial rules by Mr. Ludlow, cashier of the Ohio Life Insurance & Trust Co. in New York, in hypothecating the collection paper of Western houses. This is decidedly wrong and inexcusable, and has met with a suitable rebuke in Mr. Ludlow's arrest.

The stock and discount market is too unsettled to warrant quotations. We therefore omit our usual quotations. There have been few transactions, and those at panic and necessity prices.

We subjoin our usual quotations from Hewson & Holmes' circular:

Since our last circular, the failure of the Ohio Life Insurance & Trust Company, of this city, has been the absorbing topic of interest. This unfortunate event was not heralded by any of the indications which ordinarily precede such commercial casualties, but came upon all totally unexpected, at the close of business on Monday of last week. Thus far, this failure, from which the most serious and alarming consequences were predicted, has not involved other houses, but all stand firm; and now that the panic has in some measure subsided, no apprehension is felt regarding any other banking house in the city.

The deposits in the Trust Company are being rapidly absorbed by the payment of debts due here; thus far, she has reduced her deposit liabilities nearly \$2,000,000, by giving therefor discounted paper, and bonds and mortgages, in which her capital was originally loaned; this is unquestionably the wisest course that could be pursued, and is the only one by which this institution can be extricated from her difficulties.

The panic naturally caused by so great a calamity was, for a day or two, most alarming, but was too severe to last long, all classes of business men begin now, that their fears have subsided, to discover that they were more scared than hurt.

During the last few days, stock securities have been entirely neglected; holders have wisely withdrawn from market, there consequently have been no sales to indicate prices. A few days hence, we hope matters will again resume their usual channels, when we feel assured first class investment securities will be taken as readily at fair prices as if the Trust Company difficulty had not occurred. The country is wealthy beyond precedent, in the possession of overflowing grain crops, now just moving to market, and from which she will receive an aggregate of wealth, compared with which, the amount of capital involved in the Trust Company disaster is but a drop in the bucket.

Money negotiations are very difficult, and will continue so for a few days, meanwhile, mercantile classes are keeping snug, making no new liabilities, and bringing their business more immediately within the control of their means.

We quote Eastern exchange at 1 to 1½ prem.  
HEWSON & HOLMES.

N. B. We regret to announce, since writing the above, the temporary suspension of the Banking House of Hatch & Langdon, caused by the failure of Messrs. Beebe & Co., of New York, Wall Street. We understand Messrs. H. & L. will finally lose nothing, and will be able to resume in a short time. H. & H.

## MICHIGAN SOUTHERN—RESIGNATION OF THE PRESIDENT.

NEW YORK, Aug. 18, 1857.

To the Directors of the Michigan Southern & Northern Indiana Railroad Company:

GENTLEMEN: From the early history of this company I have been connected with it as a Director, and for most of the time since 1850 as an officer. I am about to terminate this relation, and I submit to you, as the responsible guardians of the interests of the company, my reasons for so doing.

My original connection with this company was made when the Michigan Southern Road consisted of 68 miles of strap-bar railway, from Monroe to Hillsdale. At that time the total number of shareholders was less than 40, and the total gross earnings of the line about \$70,000 per annum. In conjunction with a few other gentlemen, including Hon. Geo. Bliss, of Springfield, Mass.; Gov. Hunt, of Lockport; Hon. Hugh White, of Cohoes; and three of the present Directors of this company, Messrs. Charles Butler, John Stryker and Elisha C. Litchfield, I undertook the work of extending the line across the State of Michigan to Chicago.

In this work, encouraged and sustained by the intelligent support of an increasing body of stockholders, we were eminently successful. The enterprise was prosperous beyond our most sanguine hopes; the line soon became one of importance, and took rank amongst the leading railways of the Western States; the stockholders, from a small band of forty men, have increased to 1,400, and the earnings from \$71,580 in 1848, have grown to over \$2,700,000, in 1856. The company has now ready for operation about 530 miles of railway, besides several steamers upon Lake Erie.

From January, 1850, to October, 1855, I held the office of Treasurer of this company, and was engaged in the active discharge of its duties. At the latter date I left the country, and was absent nearly eighteen months in Europe, during which time I had no control over or connection with the management of the company's affairs here.

When I left, the direction was composed of a highly respectable body of gentlemen, including Messrs. Wilkinson, Butler, Barry, Morrison, Stryker and Elisha C. Litchfield, of the present Board, together with Messrs. Jno. B. Tewis, E. D. Morgan, Hugh White, Hamilton White, Thomas Barron and D. B. St. John. I desired then to resign the office of Treasurer; but, as I did not expect to be absent many months, the Board declined to accept it, and devolved the duties of the office upon the Assistant Treasurer, under the direction of a Special Committee, consisting of Mr. Hamilton White, Mr. Wilkinson, Mr. Stryker, Mr. Elisha C. Litchfield and Mr. Hugh White, who were charged with the full supervision and management of the Treasury and all the financial operations of the company in the absence of the Board. The Board at the same time passed a vote that "during the proposed absence of the Treasurer in Europe his liability to the company in his official capacity shall be limited to such cases only as he may actually direct and control, and as to transactions by him on behalf of this company in Europe."

At the company's request I negotiated some of its securities in Europe. This was the only connection that I had with its affairs from October, 1855, until my return to this country in April, 1857, during which time, although

my name was used here as Treasurer, I did not act in that capacity, nor receive compensation as such. Finding, in the summer of 1856, that my stay in Europe would be prolonged beyond the time that I had originally intended, I resigned the office of Treasurer, and also my place as a member of the Board, in letters addressed to the Executive Committee, which I requested should be laid before the Directors.

Upon my arrival here, in April, 1857, I found that my resignation had not been acted upon, but that my name had been, without my knowledge, continued before the public as an officer of the company. I found, also, that the company had a large floating debt, created during my absence, and increased by the fact that \$500,000 of its bonds matured on the 1st day of April last.

While willing to render such assistance as was in my power, consistent with a reasonable degree of attention to my own affairs, rendered more necessary by a prolonged absence from home, I was very reluctant to take office again in the company. At the instance of others, who seemed to think my services, for the time being, desirable, I consented to be chosen one of the Directors. But, upon full reflection, and after Mr. Wilkinson, who had been intrusted with the proxies by the Board, had left the city to attend the stockholders' meeting in Michigan, I addressed to him an earnest letter, requesting him to leave my name off the ticket. This, however, in the exercise of his discretion, he omitted to do, and having been chosen a member of the Board, I consented to serve.

The new Board met for the first time the 28th of April, and waited until the 6th of May for the result of the examinations made by the committees appointed to examine into the affairs of the company. Then the Board organized. I desired not to take office, but it was represented to me that the Directors deemed it important that I should, at least temporarily, accept the office which I now hold; and that upon that condition only could the company secure the services of the gentleman who was at the same time elected Treasurer.

Yielding to these considerations, I consented for the time to take the office. Mr. Wilkinson made the nomination in the Board, and I was chosen, and I accepted the position with more reluctance than I ever felt at accepting any other post. From that time to this I have discharged the duties thrown upon me under very trying circumstances, with all the fidelity and capacity with which I am gifted.

I suggested a plan which met the approval of the Board, in pursuance of which we have received \$1,500,000 from our stockholders in cash, upon an issue of guaranteed stock, which has enabled us to reduce essentially the floating debt of the company. Under most violent assaults from a portion of the public press, frequently doing great injustice to this company, and to individual managers, the operations of the road have been carried on to the present time—the Goshen Line is now in operation—the Detroit Road completed—the Jackson Branch nearly so—the great drain for construction is almost closed—and the road, having passed, in common with other Western lines, through a season of temporary diminished earnings, is just ready to begin to show the capacity of its now completed system. At our present meeting I have proposed a plan for funding the balance of the floating



debt of the company. With this plan successfully carried through, the finances of the company will be placed in a perfectly impregnable position. With the cordial aid and co-operation of all the members of the Board, such a consummation can be reached; without such cordial aid and co-operation no plan can be sure of success.

When I accepted the post of President of this company, it was with the distinct understanding, fully expressed by me to the assembled Board, and to the individual members of it, that I could only occupy the place temporarily, and that I should be at liberty to vacate it whenever my business or my health should require it. That time has now arrived.

Returning to this country after an absence of a year and a half, I have devoted my entire time for nearly five months to the service of this company. During that period I have not been able to spare a single day for my own private affairs. In common with other members of the Board, I have been made the subject of misrepresentation and unfounded assault in connection with this enterprise. In every sense of the word my position has been one of self-sacrifice, in the hope of being able to render service to the company. But by constant labor and confinement my health has become impaired, and I feel constrained, by the highest sense of duty to myself, to terminate my official connection with the company. I therefore hereby respectfully resign the office of President of your Board—to take effect forthwith.

In taking this step, I am actuated solely by the considerations that I have presented, and I entertain the hope that you will be able to organize in such a manner as effectually to promote the interests of the company.

This is not the place nor the occasion for a single unkind word. While, therefore, truth and a decent regard for the position of the enterprise with which we are connected, and to which we are supposed to be, as is our duty, all honestly devoted, compel me to say that this company, its position, its prospects, its past history, and some of its managers have been most grossly libeled, I prefer to entertain and express the hope that no gentlemen connected with it gives countenance to such assaults. We are placed here by the stockholders to protect their interests, and to manage in the best manner the great property which we have in charge. Full eighteen millions of dollars have been invested in the enterprise which has been intrusted to our keeping. This great interest cannot be promoted by any want of cordiality or co-operation amongst the managers. Our first duty, therefore, is to unite as one man in doing, with all our might, whatever the true interests of the company require to be accomplished. If we do this, success is certain—without it, failure is possible. And, gentlemen, you will excuse me for adding that, if for any reason this Board cannot unite in carrying out such measures as the true interests of the company demand, they have, in my judgment, but one honest and manly course to pursue—which is, to call together the stockholders to elect Directors who can act in harmony, and who, rising above personal feelings, will unite in doing that, and only that, which the interests of the company demand.

With my best wishes, gentlemen, for your prosperity, and for the success of the enterprise which you have in charge, I am,

Your obedient servant,

EDWIN C. LITCHFIELD.

#### NEW YORK AND ERIE RAILROAD.

Subscriptions will be received at the office of the New York and Erie Railroad Company, in the city of New York, until the first day of November, 1857, for the purchase of \$6,000,000 of the bonds of the Company, redeemable on the 1st October, 1880, bearing 7 per cent. interest, payable semi-annually, on the first days of April and October.

They will be sold at par, payable as follows:

50 per cent. in any of the unsecured bonds of the Company, redeemable in 1862, 1871 and 1875.

10 per cent. in cash at the time of subscribing.

40 per cent. in monthly installments of 10 per cent., or in cash, at the option of the purchasers.

These bonds are guaranteed by a mortgage on the entire Road and its franchises, on all the leasehold property of the Company, including the wharves, ferry privileges, and landed property of the Long Dock Company of Jersey City, and on the entire equipment of the Company.

The object of the loan is to fund the present floating debt of the Company, and to obtain means to continue construction of the Tunnel, Depot, Wharves and other improvements on the Long Dock property. It will only increase the present indebtedness of the Company about \$1,000,000. The following is a comparative statement of the past and present financial position of the Company.

	Sep. 30, '55.	Sep. 30, '56.	Aug. 1, '57.
Capital Stock...	\$10,023,939	\$10,000,000	\$11,000,000
Funded debt...	24,891,000	24,891,000	24,891,000
Floating debt...	1,211,763	1,104,970	2,002,135
Int. on Bonds due 1st Aug., less amt deposited to meet it.....			132,285
Total indebtedness...	\$26,102,763	\$25,995,970	\$27,025,420
Cash & cash items...	\$180,758	\$300,856	\$127,077
Materials.....	504,655	502,541	535,000
Fuel.....	497,115	728,463	630,000
Steamers and Propellers on Lake Erie....	88,875	218,331	231,229
Rolling Stock loaned to C. & N. P. R. R....	100,000	100,000	100,000
Other Assets...	10,436	46,234	28,509
Due by Agents Advanced to Long Dock Company....			430,521
Bonds of 1875 in Sinking Fund	322,000	794,000	1,315,500
	\$1,703,857	\$2,690,425	\$3,648,902

Liabilities over assets..... \$24,389,911 \$23,305,545 \$23,376,518

That the expenditures of the Long Dock Company are judicious, and sure to prove profitable to the New York and Erie Railroad Company, no one can doubt who will examine the subject. The New York and Erie Railroad Company have a lease (with the right to purchase at the original cost at any time after six years) of the entire property of the Long Dock Company, consisting of over 2,500 lots of ground, exclusive of the streets opened, or to be opened, with ferry privileges, ferry slips and wharves now in construction. The wharves will offer 7,740 linear feet of berth room. Vessels drawing 20 feet of water will receive the heavy products of the West directly from the cars, or from warehouses into which the cars will run and be unloaded in any weather, without danger of injury to property. The facilities and economy which this will offer to shippers and receivers must largely increase the traffic of the New York and Erie Railroad Com-

pany, and enable it to charge higher rates for transportation than those charged by other routes. The ferries will undoubtedly prove a source of revenue to the Company, whereas, at present, the ferrage of passengers and merchandise is a heavy tax on the Company.

Any portion of the 2,500 lots not needed by the New York and Erie Railroad Company can be sold at any time, and by the terms of the lease the proceeds must be applied to the extinguishment, or to the creation of a Sinking Fund for the extinguishment of the debt incurred for the improvement of the Long Dock property. The value of this property must be very great whenever the New York and Erie Company transfer their traffic to the new terminus.

CHARLES MORAN, President.

NATHANIEL MARSHA, Secretary.

New York, 17th August, 1857.

#### MICHIGAN SOUTHERN R. R. COMPANY.

Correspondence between a Committee of the New York Board of Brokers and the Railroad Co.

NEW YORK AUG. 11, 1857.

To the President and Directors of the Michigan Southern and Northern Indiana Railroad Company.

GENTLEMEN:—The undersigned have been appointed a Committee on behalf of the New York Stock Exchange, to confer with your Company on the subject of issues of your stock, which it is alleged have been made informally.

These allegations have assumed a definite shape, and can no longer be regarded as anonymous.

Understanding from Mr. President Litchfield that a meeting of your Board will be held to-morrow, we take the opportunity to place this matter before you for such action as you may deem proper, and to request that you will afford us an opportunity of ascertaining the precise facts, in order that we may impart fully and understandingly to our colleagues, many of whom are holders of the shares and bonds of your Company.

We are, gentlemen, very respectfully, yours,

DAVID GROESBECK,  
H. A. JOHNSON,  
A. CAMPBELL.

OFFICE OF THE MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD CO., No. 18 WILLIAM STREET, New York, August 12, 1857.

Messrs. David Groesbeck, H. A. Johnson, and A. Campbell, Committee, &c.

GENTLEMEN:—Your communication of yesterday, stating that you have been appointed a committee in behalf of the New York Stock Exchange to confer with this Company, "on the subject of issues of its stock, which it is alleged have been made informally," has been received and submitted to the Board of Directors.

We have seen with regret the charges which have been made in the public press of an "over issue," or secret or improper issue of the stock of this company.

The facts of the case, we are sure, do not justify such charges.

The authorized capital of the company is \$12,000,000. The amount actually issued and sold, as shown in our books, is:

Of old stock.....\$7,000,500  
Guaranteed stock.....3,017,250

Total.....10,023,750

In addition to the amount actually issued to the public, the Company has occasionally, as is well known, used a limited amount of its unissued capital stock, in the same manner as it uses its unsold bonds as collateral secu-



urity for temporary loans. In all such cases regular accounts have been kept upon the books of such hypothecated securities, whether stock or bonds, but the securities themselves have not been considered or reported as outstanding liabilities of the Company for the reason they were merely collateral to other than obligations, which were stated under the head of "bills payable" or "other loans." To have reported in addition to bills payable the stock or bonds belonging to the Company and lodged with them as collateral and to have classed both as outstanding obligations, would have been in that respect to have overstated the actual liabilities of the Company to the full amount of the collaterals in question.

When the present Board came into office committees were appointed who made full examinations of the bond and stock accounts. Their report, dated 5th May last, and then duly entered upon the Directors' minutes, shows that they fully understood the amount of bonds and stock hypothecated for the Company, and that they found the accounts of them to be correct.

Messrs. Keep, Welles and Vermilye the Committee upon the Stock Account, after stating the amount of stock issued and held by stockholders, added:

"In addition to this sum, certificates for 5,560 shares (\$556,000) have been executed by the officers of the Company, under authority of resolutions of the Executive Committee of the Board of Directors, and hypothecated as collateral security for temporary loans for the use of the Company.

"These certificates are duly entered in a special account of 'collateral stock' upon the general ledger of the Company, and will be returned and cancelled, and the account balanced whenever the debts for which they are pledged shall be paid."

Subsequently, both under Mr. Gray's and Hopkins' administration of the office of Treasurer, collateral stock has been used; but, as from time to time debts matured, certificates were returned to the office, and the balance of the account has varied accordingly.

The Treasurer's statement shows that the total amount of old stock issued, (including stock issued by the Company as collateral as aforesaid) was—

On August 1..	\$7,735,500
Of which there has been since cancelled.....	170,000
Total.....	\$7,565,500

But some of this stock is owned by the Company, for which it has certificates in possession, and some of the stock which had been used as collateral, has been returned to the Company, which now holds the certificates. The total of the certificates thus in possession of the Company is \$265,000.

The total amount, therefore, of all the old stock of the Company now outstanding, including all that has been used as collateral, after deducting the certificates now in possession of the Company, as aforesaid, is—

.....	\$7,300,500
The Guaranteed stock, as stated before.....	3,017,250
Total.....	\$10,317,750

By the terms of the issue of guaranteed stock in May last, each stockholder was awarded four shares of the new stock upon every ten shares of the old stock held by him. If each stockholder had applied for the amount to which he was entitled, it would have required the issue of \$3,380,000 of the guaranteed stock. The actual amount claimed by stockholders and issued to them, has been, as stated

above, \$3,017,250. It has been the intention of the directors to limit this guaranteed stock to \$3,000,000, and with this view to re-purchase and cancel the excess of \$17,250.

All the certificates of stock issued by this Company, whether as collateral or otherwise, have been duly registered and countersigned. Prior to the 19th of July this was done by the Secretary of the Company; since that time it has been done by the United States Trust Company.

Previous to the consolidation of these companies in 1855, the system of registry since adopted was not in use. It is therefore probable that some of the old certificates, prior to April, 1855, have not been yet registered.

We have thus at length given you the information desired, because we deem it due to the stockholders and the public that upon a question of this kind there should be no room for misconception, and this is merely anticipating our more formal report to the stockholders, in which the substance of this information would have been given.

This communication has been submitted to and approved by the Board, by whose direction we sign it.

Your obedient servants,  
EDWIN C. LITCHFIELD, President.  
W. M. VERMILYE, Secretary pro tem.

*Correspondence between the Committee and the United States Life and Trust Company.*

No 3 HANOVER STREET, AGC. 13, 1857.

John A. Stewart, Esq., Secretary of the United States Trust Company:

SIR:—The committee appointed on the part of the New York Stock Exchange to ascertain the amount of the Michigan Southern and Northern Indiana Railroad Company now outstanding, beg leave to ask your Company, acting as registers for the above named, whether or not 70,000 shares of old stock and 30,000 of new or guaranteed stock comprise the whole number of shares of the stock of the Michigan Southern and Northern Indiana Railroad now outstanding? If not, please state the number of shares in excess of the above.

Does your Company hold itself responsible for the correctness of the transfer of this Company, and does it hold itself liable to the public for any issue of stock beyond the number above stated, viz: 100,000 shares in all of both kinds, which number of shares the Company has stated as the amount of its capital issued as per their last report.

(Signed) DAVID GROESBECK,  
H. A. JOHNSON,  
A. CAMPBELL,

UNITED STATES TRUST CO. of NEW YORK,  
No. 40 Wall Street, Aug. 13, 1857.

To Messrs. Groesbeck, Johnson and Campbell, Committee of the New York Stock Exchange.

GENTLEMEN:—In reply to your communication of this date, I state that the number of shares of the Michigan Southern and Northern Indiana Railroad Company's stock reported to us by the officers of the company is 30,170 shares of the preferred, and 75,655, shares of the other stock.

The arrangement of registration between the Railroad Company and this institution is, that the railroad company have certified to us the above number of shares as the stock of the company, and on that as the basis the registration of certificates by us takes place, this institution holding itself responsible to the railroad company and its stockholders and the dealers in both of our certificates, that no stock shall be certified by us beyond

the amount of shares so reported by the railroad company, nor without the cancellation of the outstanding certificates for stock surrendered to us, and that in case of the creation and issue of new stock by the railroad company, they will report to us their act in this respect, which will be published, and the same system of registration by this company will apply thereto.

We consider it the duty of this company, as register, to be able at any time to furnish to parties having a right to ask it, a statement of the number of shares represented by outstanding certificates, countersigned and registered by this company.

I am, gentlemen, with much respect, your obedient servant,

JOHN A. STEWART, Secretary.

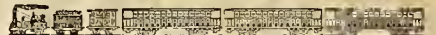
During the State Fair, the Cincinnati, Hamilton & Dayton Company will run a special train to and from the Sixth Street Depot and the Fair Ground. Mr. McLaren has not decided upon the details of the running arrangements of this train, but we learn that it will be run at intervals not greater than half an hour, from six in the morning until late at night. If a line of omnibuses could be run in connection with this special train—the omnibuses leaving the Post-office every five minutes—the facilities for reaching the Fair Grounds would be nearly perfect.—*Commercial.*

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
feb19-1m 9 South William street, N. Y.

## PERU & INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Freight Ag't.  
Indianapolis, Sept. 16, 1856. [mb29-1y.

## To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great Wabash River, in White county, and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.



## The Polytechnic College of the State of Pennsylvania.

WEST PENN. SQUARE.

The Polytechnic College, incorporated by the Legislature, 1833, on the plan of the Industrial Colleges of Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to DR. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia.  
Aug. 20-6t

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by  
CHARLES W. COPELAND, Gen. Agent.  
jy30 No. 66 Broadway, N. Y.

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by  
GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c., executed in the highest style of the art.  
MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building;

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

## SAFETY & ECONOMY.

**JAMES HARRISON JR.'S**  
Automatic Steam Whistle,  
FOR LOCOMOTIVES.  
PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to  
JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

F. W. RHINELANDER.  
JAMES A. BOORMAN. EDWIN A. POST.  
RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS  
AND  
COMMISSION MERCHANTS,  
Supply all material and articles used in the construction and operating of railways

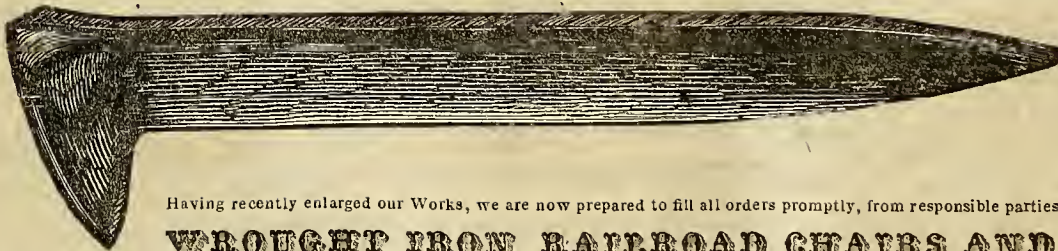
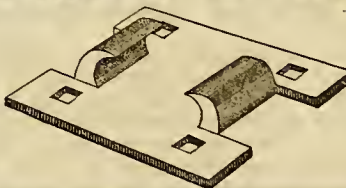
Bank of Commerce Building, N. Y.  
Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncau, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

## CINCINNATI WROUGHT-IRON

# RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an Improved Method. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3rd: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE &amp; CRAWFORDSVILLE, and the TERRE HAUTE &amp; ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:16 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. for the West and South, as above.

E. J. PECK,  
Supt. Terre Haute & Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via, Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via, Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M. and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Om nibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Om nibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L  
Office No. 2 Burnet House.

1856.

1857.

1857.

Summer Arrangement.

1857.

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, PHILADELPHIA, ST. LOUIS, CLEVELAND, LAFAYETTE, DUNKIRK, LOGANSPORT, BUFFALO, CHICAGO, NIAGARA FALLS, NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day. WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

## Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

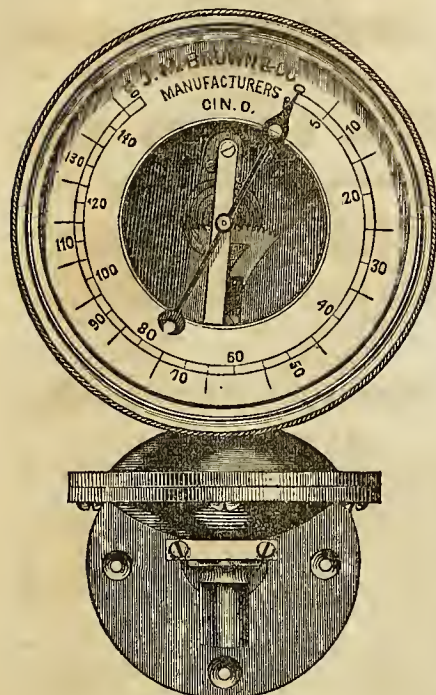
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.



## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES.  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA. [200]

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7 '56-2m.] A. H. GOODMAN & CO.,  
No. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS & NIXON

No. 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush—

Printed and Unent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width—

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING  
N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON

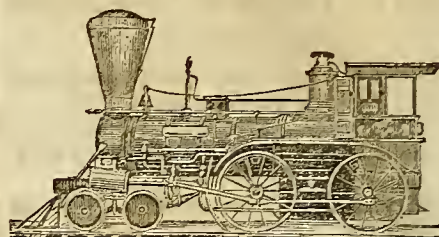
## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological maps prepared.  
mar14 y

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws.

## LOCOMOTIVE ENGINE LANTERNS.

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

## Cotton Duck for Cr Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Bolts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

## Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
1066.

## GEO. D. WINCHELL & BRO.,

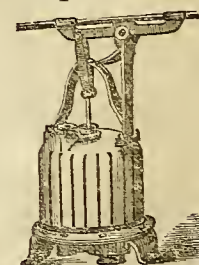
172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fine Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

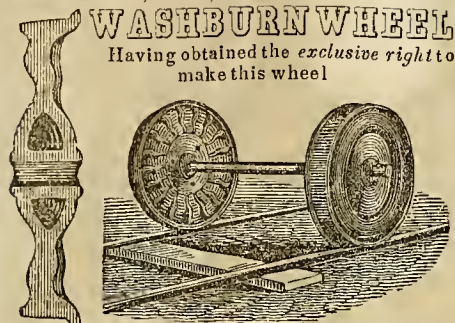
Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.  
Orders thankfully received and promptly filled at the shortest notice.

1st PRIZE MEDAL. (The highest prize) awarded to these pumps at the Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

PHILADELPHIA

## Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowlling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,  
Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps, and Can-  
dlesticks, Brass and Tin Glove and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dodgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

Baggage Barrows and Checks, Freight Trucks,  
**CAR FINDINGS,**

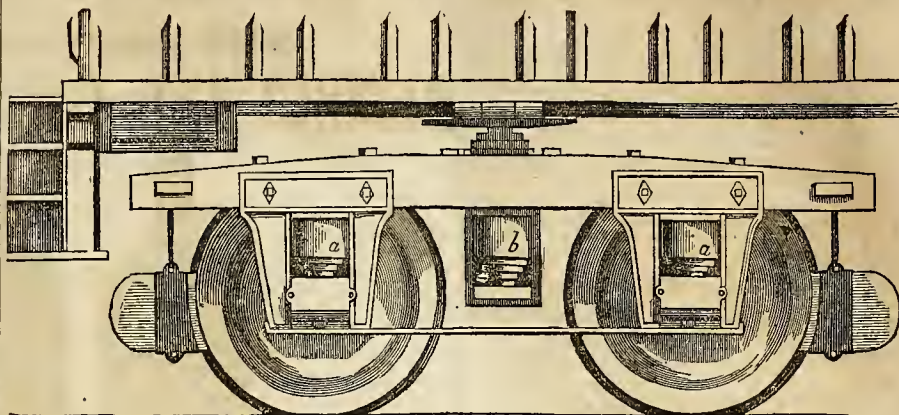
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED.

cc25-1y

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to **RICHARD VOSE, Secretary, N. Y.**

J. DAVENPORT... M. D. WELLMAN... C. M. RU

## DAVENPORT, RUSSELL & CO.,

## Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

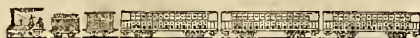
Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th

JOSEPH DAVENPORT.

## MUSKINGUM WORKS

ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL,

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,

Janl.

Muskingum Works, Zanesville, O.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars

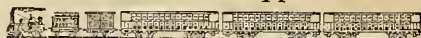
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1 n2t

NEWARK, N. J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
Robert Harris, Sup't.  
Racine, May 15, 1857.

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the **Ohio and Mississippi Railroad.** Passenger Trains leave Cincinnati at 4.45 A. M., 1.35 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855.

[Janl-17]

Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
110 Wall st., near Broadway, New York.

feh5-tf

**SILVER, GOLD, LEAD,**

And Other Minerals,

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUBAC, OADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cincinnati, O.

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in different freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,**  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,****Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 225 H Street, Washington, D. C. apr12

**Thorough Bed Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,  
"TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON,

CINCINNATI:

THURSDAY MORNING, SEPTEMBER 10, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS PER ANNUM, IN ADVANCE.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 29.

#### EDITORIAL.

The Michigan Railroads—Grand Rapids & Indiana R. R. ....	461
The Illinois Southern Railroad .....	462
A New Railroad .....	462
Railroad Convention in New York .....	462
Railroad at Ocala .....	462

#### RAILROADS.

Southwestern R. R., Ga. ....	465
Michigan Central R. R. ....	467

#### MISCELLANEOUS.

National Railroad Convention .....	463
Pensacola Paint .....	465
Foreign Commerce of New York .....	469
Harvard Degenerate .....	469
Earnings .....	468
Comparative Advantages of Rich and Lean Ores in the Blast Furnace .....	470
Wrought Iron Beams and Joists .....	470
The Railroad System .....	471
The Atlantic Telegraphic Cable .....	471

#### MONEY AND STOCKS.

Table of Stocks and Bonds .....	463
London Quotations .....	469
Sales at the New York Stock Board .....	469
Monetary and Commercial .....	469

**SILVER ORES FROM THE GADSDEN PURCHASE.**—We mentioned a short time ago, in our paper, that the Sonora Exploring & Mining Co., of this city, had received a small shipment of the ores of the mines now opened by its agents. The following are the analyses, as made by the gentlemen whose names are attached to them:

	Silver in the pound	Avoidupois.
Prof. Jas. C. Booth, of the United States Mint at Philadelphia .....	\$0.67	1-10
Do. ....	0.23	3-4
Prof. John Torrey, of the U. S. Assay Office, New York .....	0.16	14-100
Prof. John M. Locke, of Cincinnati .....	0.20	1-5
Edward Kinsey, Manufacturing Jeweler, of Cincinnati .....	0.61	1-8
Do. ....	1.34	

The average of the above yield is a fraction over 53 cents of silver to the lb. avoidupois of ore. Estimating the labor of one man to raise 300 lbs. of ore per week, the proceeds of each man's labor would be \$150 per week. It will, therefore, be seen that this company is likely to realize a handsome profit on the investment they have made.

VOL. 5.—NO. 29.

### THE MICHIGAN RAILROADS—THE GRAND RAPIDS & INDIANA R. R.

We have heretofore fully described the grant of lands by the Government to the Michigan Roads, and the limitation of their locality to the eastern and western sides of the State, from the northern terminus of Ohio and Indiana to Grand Traverse Bay and the Straits of Mackinaw.

Looking upon these works as of great importance—not merely to Michigan, but to Ohio, Indiana, and the city of Cincinnati, we have watched with interest the progress made towards securing the lands and locating the roads. The respective companies chartered by Michigan have been examining and locating the routes during the season. Both have made their locations (for routes), but have not been equally fortunate in the lines selected. The eastern company, whose line passes through Lansing (the seat of government), either with the view to secure more land, or to gratify the local feeling of small towns, have chosen a very tortuous and, of course, in regard to a through traffic, a very unnecessarily elongated line. Proceeding from Lansing east, thence west, thence north, if the road is actually constructed on the line proposed, there must be a loss on the direct distance of seventy or eighty miles between the line of Ohio and Grand Traverse Bay. This, however, is a matter with which we do not pretend to interfere. If the people there choose to lose the advantage of a great through line from the northern to the southern extremities of the United States, they have the right, but must abide the consequences. It seems to us that all railroad locations should be made with reference to the *best routes*. This is the only course which will eventually make railroad stock valuable, or secure business.

The western road is called the *Grand Rapids & Indiana R. R.*, of which Mr. J. LOMAN (of Sturgis) is President. This company seem to have taken a wider view, and, looking to the *ultimate* interests of the company, have located the route with reference to the great arterial line from north to south. Commencing at a point on the Indiana State line, where a direct line from Fort Wayne to Grand Rapids would intersect it, the line passes through Centerville (St. Joseph county) to Kalamazoo; thence through Allegar county to Grand Rapids; and thence to the Straits of Mackinaw. From Cincinnati to Mackinaw on a direct line is just 450 miles; but, as a railroad cannot be made exactly straight, and Fort Wayne is west of a direct line, the route selected will a little exceed 500 miles. The deflection through Fort Wayne and Kalamazoo causes only one important angle, at Grand Rapids. From Grand Rapids to Cincinnati, by Fort Wayne, is almost a straight line; and, as the commerce west is more important to Cincinnati than that east, the location of this

route is a good one for this city. It will draw the whole trade of the eastern shore of Lake Michigan, and especially an immense lumber trade to Cincinnati. This lumber trade is essential to Southern Ohio and Indiana. It is in fact a *necessity*; and capital could not be better employed than in opening up the pine forests of Michigan for the use of the Ohio valley.

The *means* at the command of the Grand Rapids & Indiana R. R. Company to construct their road will consist largely of the government lands. It is supposed (the calculation being based on the locality of the road) that at a *minimum* the lands granted will amount to about 700,000 acres. The sales of the Illinois Central Railroad have amounted to about \$11 per acre, on an average. Hence, it is supposed by some that the Michigan lands will be equal to \$10 per acre; but, as they are not so fertile, we think not. It would, however, be within the most moderate calculation to say they would bring \$5 per acre; and hence something like \$3,500,000 may be counted on, as a *basis* for all the stock and loans to be subscribed for its construction. There can, therefore, be no doubt this work will be made, and its route is such that it will have no competition. Hence we may safely regard it as one of the best enterprises of the day. Even amidst all the gloom and disaster which has attended railroad credit, it would be difficult to find any reason for failure where so much capital and so many favorable circumstances attend the scheme. Its beginning is auspicious, and we anticipate a favorable conclusion.

We extract from the *Sturgis Republican* a more detailed view of the route and cost. The *Republican* says:

"Should the Department at Washington be governed by a narrow policy, and confine the grant to 614,460 acres, then, at \$10 per acre, it will amount to \$6,144,600, which is "*a good basis*" for the company; but should a liberal policy prevail, then the lands will be sufficient to reach the sum of \$8,256,000.

The length of this road, from the Straits of Mackinaw to Fort Wayne, will be about 350 miles. If the company meet with as good success as the merits of the enterprise deserve, the entire cost of the road should not be over \$25,000 per mile, which makes an aggregate sum of \$8,759,000. Then, if our calculations are correct, good management on the part of the company, and a tolerable share of good luck, will enable them to construct the road and keep their lands on hand until the amount realized from their sale will discharge nearly the entire cost of construction and equipments. If these views of the subject are correct, the future prospects of the company are indeed flattering."

The country is new, but its resources are great, and already there are many flourishing settlements on the line of the road. The *Republican* says:

"The villages through which this line of road passes are generally in a healthy and prosperous condition. At the northern ter-



minus is the village of Mackinaw; on Traverse Bay there are several small villages; the next village is Newaygo, which is the *county seat* of Newaygo county; the next place is the city of Grand Rapids; then Otsego, Kalamazoo, Brady, Mendon, Sturgis, Lima, Lagrange, Wolcottville, Rome, and after that the road may be so located as to touch no other village until it reaches the city of Fort Wayne. It will pass near several between Rome and Fort Wayne. At Traverse Bay, Newaygo, Grand Rapids and Otsego there are already considerable mill improvements; and there is a vast amount of water power at each of them. The whole country, so far as *settlements* extend, is pretty well supplied with *saw mills*, and as soon as this road is constructed many more villages and mills will be the consequence."

The President and officers of the road seem to be energetic, and determined on doing all that is possible for the success of the scheme. Large surveying parties have been out all summer, and completed the preliminary examinations. Other parties will soon proceed to make more definite arrangements, and locate the road for a commencement of work. With any tolerable good fortune, and good management, this road will be made.

#### ILLINOIS SOUTHERN R. R.

This important enterprise, which is to connect Cincinnati, on the northern side of the Ohio, with the great southwest chain of railroads destined to run across the continent to the Pacific, is receiving some attention at the hands of our citizens. The *Daily Commercial*, of this city, says:

"The Illinois Southern Railroad is a work that will attract attention in this city, from the fact that its completion—now probable—will open a direct route from Cincinnati to the mouth of the Ohio (Cairo), and to a connection with the Cairo & Fulton and Mobile & Ohio Roads, at the confluence of the Ohio & Mississippi rivers. This route will be via the Ohio & Mississippi Road to Vincennes, which is the eastern terminus of the Illinois Southern Road—a line about 180 miles in length. The President of this road is now at his home in Hillsborough, in this State, but intends to return to "Egypt," and devote his entire attention to the prosecution of the work. The recent meetings along the line of the road indicate a subscription of about \$100,000 for each county between the Wabash and the Mississippi. We should be pleased to receive from the officers of the Illinois Southern Co. a statement of the condition of this enterprise, its exact length, its gauge, etc."

The *Commercial* does not overrate the importance of this line to our city and the railroads centering here. The Ohio & Mississippi to Vincennes, and the Illinois Southern from thence to Cairo, at the mouth of the Ohio, will form a great arterial line, corresponding to the great water line laid down by nature—the Ohio river. The general direction of this line will be taken up at the junction of the Ohio and Mississippi rivers by the Cairo & Fulton Railroad, the building of which is insured by extensive land grants. From the terminus of the Cairo & Fulton R. R. a junction will be made with the South-

ern Pacific Railroad, now building—thus forming over this line the shortest possible route from New York, Philadelphia and Baltimore, through Cincinnati, to the Southwest and the Pacific.

The total length of the Illinois Southern R. R., from its terminus on the Mississippi to Vincennes, is 150 miles. The portion that the company now propose to build, from the Mississippi to Grayville, on the Wabash, is 108 miles. The company propose to grade this line with the means which they can command from subscriptions, private and corporate, along the line of their road. Arrived at Grayville, they have the navigable waters of the Wabash. From Grayville to Vincennes is 42 miles, at present unprovided for. The connections offered to the road at Grayville are:

1st. A connection with the Evansville & Crawfordsville R. R., by a branch from Grayville to this road, 19 miles long.

2d. A connection with the same road at a point further up the Wabash, by a branch 9 miles long.

3d. A connection with the Grayville & Mattoon R. R., from Grayville to Olney, 32 miles, and thence by above railroad to Mattoon, on the Chicago Branch of the Illinois Central R. R.

The first two connections would involve a gauge corresponding to the gauge of the Evansville & Crawfordsville R. R., and would necessarily divert the trade of this road to Terre Haute and the northern lines of railroad; thus carrying to the Lakes what naturally belongs to the Ohio valley.

The third connection would involve a uniform gauge with the Mattoon R. R. and the Chicago Branch of the Illinois Central R. R., and would divert the trade of Southeastern Illinois to Chicago.

The true policy for Cincinnati and the Ohio & Mississippi R. R., is to secure the completion of the link of this road between Grayville and Vincennes on a gauge corresponding to the gauge of the Ohio & Mississippi R. R. The Ohio & Mississippi R. R. will then form a grand line, branching out at Vincennes to St. Louis and the Northwest, on the one hand, and on the other to Cairo, and Arkansas, and the whole Southwest. The importance of such a connection must be apparent.

#### A NEW RAILROAD.

We learn from the Thomasville *Watchman* that a new company has been organized for the construction of the Georgia and Florida Railroad from Albany to Thomasville. It is proposed to run the road direct from the east bank of the Flint opposite Albany, to a point on Barratt's Creek, half way from Thomasville to Brainbridge with a branch to each place. The subscription books were opened and some stock subscribed.

#### RAILROAD CONVENTION IN NEW YORK.

We give elsewhere the proceedings of the Railroad Convention held last week in New York, as reported in the *New York Courier and Enquirer*. The Convention was not as largely attended as was expected. Considerable discussion was, however, had as to the working of railroads, and the Board were instructed to take immediate measures for the arrangement of a national trial of locomotives and railroad machinery on the Philadelphia, Wilmington & Baltimore R. R., on the 1st November next. There are two serious objections to the trial on Nov. 1st. One is the shortness of time intervening between now and the date fixed, and the other is the expense attending its preparation. Locomotives and railroad machinery are not like the patent rat traps usually exhibited at Fairs.—They cannot be made in a day, and moved from place to place in an hour. And hence were it practical to bring about such a trial, for general good purposes, a month and a half, which is all that is left before the day named, is too short a period to prepare such pieces of machinery as will be fair exhibitions of mechanical skill and efficiency in shops which do not keep them on sale. The second objection is even greater than the first. The expense attending the moving of locomotives is enormous. Were all our railroads of one gauge—so that a locomotive built in New York could run all over the country, the transportation of such machinery would be an entirely different thing; but it is no small matter to transport 25 or 30 tons of machinery in one mass; to load and unload it, to cross rivers and pass through cities. As a *National* affair, the National Trial of Locomotives on the 1st of November will be a failure. As an exhibition for a few shops in the immediate vicinity of the Philadelphia, Wilmington & Baltimore R. R., it may be a splendid thing. It will at least give the appearance of a *National* sanction to what, in the nature of things, can only be a local trial. We, therefore, conceive that the gentlemen who have planned this great *National* Trial of Locomotives and Railroad Machinery will unwittingly (perhaps) lend themselves to the ambition of a few of the leading shops in the immediate neighborhood of the trial grounds; and, in so doing, will do an injustice to those whose distance from the scene of trial and short notice will preclude them from entering into it.

**RAILROAD AT OCALA.**—We understand that Mr. Yulee has communicated to Col. Perry that contracts for continuing the Fernandina Railroad to Ocala would be made during the present year. Mr. Yulee desired Col. Perry to communicate the information upon his authority. Mr. Yulee is the President of the Fernandina and Cedar Keys Road, and his assurances ought to be considered good authority.



[From the New York Courier and Enquirer, Sept. 2.]  
**NATIONAL RAILROAD CONVENTION.**

A Convention of gentlemen connected with various railroads in the United States was called to meet at 11 o'clock yesterday morning, at the rooms of the American Institute, No 351 Broadway.

At 20 minutes after 11 o'clock the Convention was called to order by Mr. Holley, editor of the *American Engineer*, of this city, who read a list of the railroad men who authorized the call of the Convention, and said the object of it was to discuss and adopt improvements in railroad machinery, &c.

Mr. Headley, of the Morris & Essex Railroad was chosen Chairman.

Messrs. H. Ross Winans, locomotive builder, of Baltimore, S. J. Hayes, of the Illinois Central, and Rice, of the New York & Erie, were chosen Vice Presidents, and Mr. Holley, junior editor of the *American Engineer*, was elected Secretary.

The Secretary read the call for the Convention, which sets forth at length the necessity for economy in the running of railroads, and the practicability of introducing improvements, especially in the matter of fuel, &c. The call also speaks of a trial of engines, to take place in October. The members then handed in their credentials to the Secretary. Messrs. Zerah Colburn, E. C. Cabell, John O. Stearns, Ross Winans and J. Hays were appointed a committee to prepare business for the Convention. Mr. Roberts, of Philadelphia, offered the following resolutions:

Resolved, That a committee be appointed, to be elected by the Convention, to organize a permanent Association, to be called the "American Association for the Improvement of Railway Machinery."

Resolved, That said Association have for its objects the improvement of railway machinery by actual experiment, competent trials, and by comparison of verified reports from the different railways of the United States.

Resolved, That this Association elect a committee annually to make such experiments upon all improvements offered, at such time as the Association may deem proper, and report thereon.

Resolved, That the Association also appoint a committee annually to obtain and publish reports on the various improvements tested on each of the railroads, and on the economy of their running and repair expenses.

Resolved, That the Association elect a committee on finance, to collect money from the various railroads to meet the necessary expenses.

Resolved, That the Association meet annually at the different cities throughout the United States, to consider the progressive improvement of railroad machinery.

These resolutions were referred to the Business Committee.

The President remarked that he supposed the Business Committee would consider the whole subject of economy in the management of railroads to be brought before them.

#### AFTERNOON SESSION.

The Business Committee reported the resolutions referred to them, and the resolutions were passed.

On motion of Mr. Roberts a recess of ten minutes was taken, during which some retired and some came up to the Secretary's table and signed the Association resolutions. The following are the names of the signers:

T. S. Headley, of the Morris & Essex R. R., New Jersey; H. Rice, New York; S. J. Hayes, of the Illinois Central R. R.; S. P. Moore, Elizabethport; Ross Winans, Baltimore; Thomas Prosser, 28 Platt street; W. S. Hudson, of the Patterson R. R.; A. A. Perkins, Great Falls & Conway R. R.; Jno. J. Pickering, of the Danbury & Norwalk R. R.; J. R. Fisher, 169 Broadway, N. Y.; Jos. Anthony, Greenbush, N. Y.; Zerah Colburn, of the *American Engineer*; A. Roberts, Pen-coy Iron Works.

At the expiration of the recess Mr. Roberts said that there were more gentlemen who had not signed the papers, and moved that the Convention resolve itself into an Association.

Mr. Boardman, locomotive builder, said he did not understand the resolutions, and hoped the framer of them would state to the Convention what he meant; he did not want to be considered a member of the Association without his consent.

Mr. Holley said that those who subscribed their names had formed an Association, and that they had better go on with the business of the Association.

Mr. Boardman—And what do you do with the Convention?

Mr. Holley—The Convention is respectfully invited to attend.

Mr. Roberts offered a resolution to the effect that the gentlemen present who had not signed the resolutions should be invited to participate in the action of the Association. The question was put and carried, and on motion the Chair was empowered to appoint a Committee of three to nominate officers for the Convention. Messrs. Colburn, Congdon and Hayes were then chosen, and retired to deliberate.

Mr. Headley then left the Chair and addressed the Association. He said that the call for the Convention was signed by men connected with the most prominent railroads in the United States. It was well known to all present that this was a day of depression to railroads, which were said to be fraudulent institutions, and were looked upon in the best of times with suspicion. Little attention had been paid to the manufacture of locomotives; he wished to call attention to the best material and have first class men to work it. A man who was fit to work for a railroad, he thought, was fit to make a living anywhere. He remarked that there was a general cry against free passes. There are two ways to govern men—by physical and moral power. The man governed by physical power did the least work he could to escape punishment; but if a man was made to feel that his employer was just, and that justice was tempered with mercy, he would do well. Mr. Headley was in favor of railroad companies building cottages, &c., for their employes, and making them a home. He had once heard a man say that he would run his engine if he ran her to hell—that man was governed by physical force.

The Committee on Permanent Officers returned and reported on the following officers of the Association:

President—J. P. Jackson, of the New Jersey R. R.

Vice Presidents—J. F. Headley, A. S. Sweet, Jr., Thos. E. Roberts.

Secretary—A. L. Holley.

Treasurer—S. F. Headley, of Newark.

Mr. Jackson declined the Presidency, and said that, if he were in order, he would propose, as a substitute, Mr. Headley, who previously occupied the Chair. When he received the invitation, through the post office, he had expected to meet a large class of railroad men, as well as the mechanical men whom he saw. He did not decline through any disrespect he entertained for the organization. He was surprised to find none of those who signed the call present; yet he would be sorry that the meeting should separate without attaining their original object.

Mr. Jackson's resignation, however, was not accepted. The nominations were confirmed, and Mr. Headley left the chair. Mr.

Jackson thereupon reconsidered his resignation, and consented to accept. Upon taking the Chair, he said he did so reluctantly. He was a burdened man, and feared he could not give his attention to the association. There was a point to which he should direct the attention of the members. If their arrangements could not be perfected now, let them meet again. He hoped the members of the association would act practically.

It was moved that a Committee be appointed to make experiments upon improvements actually carried into practical operation.

Mr. Headley said that if the committee-men were locomotive builders, it would be called a white-washing committee. The members should be men of integrity and ability. He suggested that the chair be empowered to appoint a committee within ten days. There might be good men present, but he had not the pleasure of knowing them.

The Chair said that the committee in question would be an important body, and he did not want men on it who would favor certain improvements to the exclusion of others, and thought that if it were a sort of executive committee it would suit all parties better.

A delegate proposed that the number of the committee be increased to ten. Carried.

Messrs. Colburn, Hayes and Headley were then appointed a committee to obtain and publish reports on the various improvements in railroad machinery.

Messrs. Holly, Rice and Winans were chosen a committee on finance, to collect money from the various railroads and other parties.

The 6th resolution was amended so as to read—"The annual meeting of the association," &c.

Mr. Roberts proposed to meet annually on the second Wednesday in September of each year.

Mr. Fisher said the Fair of the American Institute would take place in October, and in his opinion, that time would suit. He would ask the gentleman to consider whether October would not suit better than September. The matter was left open for further consideration.

The 8th resolution was next taken up, and Mr. Headley moved as an amendment that the word "Constitution" be inserted so as to read thus: "For the Government and Constitution of the Association." The amendment was adopted, and Messrs. Boardman, Headley, and Colburn were chosen to prepare the by-laws, etc.

Mr. Boardman moved that a Committee of three be appointed to prepare business for the Association, which was carried, and Messrs. Hayes, Hall and Fisher were chosen.

Mr. A. R. Marshall, of Virginia, rose to inquire how propositions conceived to be useful would be received. He was present to represent the general interests of the Virginia Railroad, and more particularly to avail himself of this opportunity of meeting so many mechanical and railroad men to lay before them an invention that had been subjected to practical experience, and had been in successful operation for many months. The invention was in regard to the brake system of railroads. The retarding power of the railroad by the present system is certainly defective. It is a secondary power, when it ought to be a primary and instantaneous. The man who sees the danger is the man who ought to strike it down.

An adjournment being moved by Mr. Headley while Mr. Marshall was speaking, the chair suggested the propriety of bringing Mr.



Marshall's invention before the association on Wednesday, when it was thought many railroad men would be present.

Mr. Marshall consented, and the Convention was adjourned to meet at the same place at 10½ o'clock to-day.

#### SECOND DAY'S PROCEEDINGS.

The Convention assembled yesterday, pursuant to adjournment, at the American Institute, and was called to order at a few minutes before 11 A. M., by the President, Mr. J. A. Jackson. The Secretary read the minutes of the two sessions of the day before, which were approved.

The following order of business for the day, presented by committee previously appointed for that purpose, was adopted:

1. Report of the Committee on the Constitution and By-Laws.
2. Announcement of the Committee of ten on experiments.
3. Appointment of Local Committees.
4. Paper by A. L. Holly on the combustion of coal in the Dumpfel boiler.
5. Paper by Zerah Colburn on tools.
6. Paper by Mr. Headly.
7. Paper by Zerah Colburn on Baldwin's engines.
8. Mr. Hayes on Ebbert's feed heaters.
9. Mr. Bullard on Davis' chairs.
10. Mr. Anthony on railroad joint and stringer.
11. Mr. Lawton on boxes.
12. Mr. Hoagland on piston.
13. Wrought iron car wheels.
14. Mr. Marshall on a new car brake.
15. Mr. Bissell, model of locomotive truck connection.

The Committee on the Constitution and By-Laws submitted their Report, which, after considerable discussion, was adopted. The Constitution, as adopted, reads as follows:

ART. 1. Whereas, it is desirable and expedient to form an Association for the improvement of railway machinery, by means of practical experiment, competitive trial, and by comparison of verified reports of the different railways in the United States, we hereby form this Association, to be called the American Association for the Improvement of Railway Machinery.

ART. 2. The Association shall have for its objects the conduction of actual practical experiments with, and trials of, railroad machinery and all railroad improvements actually carried into practical operation, the collection of all information relating to such improvements and machinery, and the publication of such results and information, for the general use of the members.

ART. 3. The members of the Association shall comprise any railroad companies of the United States, in their corporate capacities, and such individuals as may be interested in the objects of the Association.

ART. 4. The affairs of the Association are to be conducted by a board of eleven managers, to be chosen in annual meeting by ballot; but, for the first year of the existence of the Association, the election of President, Vice Presidents, Secretary and Treasurer, as already made, are confirmed, and the first election of managers shall be for seven members, in addition to the present President and Vice Presidents. The managers shall continue in office one year, and until others are chosen; and they shall have power to fill vacancies and increase the members in their body. They shall, at all elections subsequent to the first, elect their President, Vice Presidents, Secretary and Treasurer.

ART. 5. Five members of the board of managers shall constitute a quorum for the transaction of business.

ART. 6. The annual meeting of the Association for the election of officers shall be on the second Wednesday in September.

ART. 7. The board of managers shall meet steadily on the first Tuesday in every month for the transaction of such business as may come before them; and at the stated meeting in September shall make a report to the Association of their proceedings for the past year. The meeting of the board of managers shall always be open to every member of the Association to take part in the proceedings, but not to vote upon any question.

ART. 8. The funds of the Association shall be at all times subject to the control and disposal of the board of managers, but they shall have no authority to enter into any contract whatever in behalf of the Association; nor are the members to be at any time accountable for any contract made by the directors beyond the funds in the hands of the Treasurer.

ART. 9. The board of managers shall have power to make such By-Laws as may be deemed necessary, not inconsistent with the Constitution; to employ a Secretary, and to allow him such compensation as they may think proper.

ART. 10. Any alteration or amendment in these Articles shall be proposed at a stated or special meeting of the Association, to be approved by two-thirds of the members present.

The appointment of Committees being superceded by the Constitution, Mr. A. L. Holly, the

Secretary, then read his paper on the Combustion of Coal in the Dumpfel Boiler. It contained an interesting account of the combustion of smoke and fuel, and claimed that the combustion of fuel in the Dumpfel boiler, conformed with the chemical requisitions of perfect combustion. Mr. Holly stated that he had received letters giving a favorable account of the result of its trial on different Railroads.

A motion to refer the paper to the Board of Managers, gave rise to remarks from several gentlemen present, calling in question the propriety of establishing a precedent in giving the sanction of the Association to an invention, which, although shown by an experiment to be a useful one, might be no better than many inventions of a similar character which had not yet been tested. An amendment was offered and adopted to place the report on file.

A paper was then read by Mr. Zerah Colburn, upon the superior quality of the railway machinery and tools manufactured by Wm. Sellers & Co., of Philadelphia. A gentleman present stated that he had visited Seller & Co's Works and the "Industrial Works," of Philadelphia, and his impressions were more favorable to the latter than to the former. The report was then placed on file.

Mr. Headley's Paper on Iron was not ready for presentation.

Mr. Zerah Colburn then read a Paper on Baldwin's Engines. Ordered on file.

Mr. Hays presented, and explained the construction of a model of Ebbert's Feed Water-Heater, adapted to heating water to a boiling heat and of saving from 16 to 20 per cent. in the amount of fuel consumed. Placed on file.

The Convention then adjourned to 2½ P. M.

#### AFTERNOON SESSION.

Immediately on resuming business at 2½ P. M., Mr. Headley moved that the number of the Board of Managers be increased to twenty-one, which was adopted.

On motion of Mr. Headley, it was decided that the Chair appoint a committee of three to nominate candidates to the Board of Managers, so as to complete the number of twenty one. The Chairman accordingly named Messrs. Headly, Colburn and Winans as such Committee. Mr. Colburn declined serving, and Mr. Rice was appointed instead. On retiring to consider,

Mr. Bullard came forward and spoke of the Davis Chair, which he said would cost 61 cents as usually manufactured, but it could be made for 55 cents in the shops of the Railroad Companies.

The nominating Committee returned and presented the following names:

- J. Edgar Thompson, President Penn. Central Rail Road.  
S. M. Felton, President Phil. Wash. and Balt. R. R.  
B. H. Latrobe, Cornellville R. R.  
A. F. Smith, Hudson River R. R.  
Sam'l J. Hays, Loc. Superintendent Illinois Central R. R.  
Charles Moran, President Erie R. R.  
J. D. Steel, Assist. Engineer Reading R. R.  
J. B. Jervis, Civil Engineer  
James Campbell, President Harlem R. R.  
Wm. E. Morris, Supt. Long Island R. R.  
Henry Gray, Superintendent Western R. R.  
Zerah Colburn Editor American Engineer.  
H. V. Poor, Editor Rail Road Journal.  
John B. Winslow, Supt. Boston and Lowell R. R.  
M. M. Rounds, Loc. Supt. N. Y. & N. Hav. R. R.  
Joseph H. Moore, Supt. Pitts. Ft. Wayne & Chi. R. R.  
John O. Stearns, Supt. Central R. R., New Jersey.

Mr. Colburn could not see why gentlemen who were not members of the Association should be nominated. He had no other objection to urge against the names presented; if the members were willing to overlook this objection, he would also do so, and would vote in favor of the candidates named by the nominating committee.

The Chair considered that the Association acted wisely in their nomination, as the character of the candidates would give weight to the inventions which they would approve.

The nominations to the Board of Managers were approved.

Mr. ANTHONY spoke in favor of the system of fastening rail-joints, and of supporting the joints in such a manner that the rail could neither spring nor sink.

Mr. BULLARD wished to know how a broken rail laid in such a manner could be taken up and repaired in winter, and thought the invention a good one, if the rigidity of the rail were to be considered an advantage or an excellence.

Mr. ANTHONY said there was no more difficulty in repairing a rail laid in the manner he proposed, than in repairing any other rail, and as to rigidity, he would venture to state his opinion that it was a desirable quality, although the generally received opinion was against him.

Mr. H. CARPENTER, of Brooklyn, said that on the Erie Railroad at about twelve miles from the city, there was an improvement on one of the most acute curves on the road, made entirely of cast iron, and dispensing with a chair, spikes and bolts. He said it had proved a successful experiment.

Mr. A. K. MARSHALL continued his remarks of the day before, upon the McDonald car brake to which he claimed the exact amount of force required by the engine in arresting the motion of the cars could be applied. He presented commendatory letters, which were, on motion, referred to the Board of Managers.

Mr. FISHER then made a few remarks upon the subject of hoxes and journals. He believed that a lubricating principle could be introduced into the composition which would greatly lessen the amount of friction.

The Secretary then presented the following resolution which was adopted after some discussion:

*Resolved*, That the Board of Managers take immediate action in relation to the arrangement of a national trial of locomotives and railroad machinery, to occur on the Philadelphia, Wilmington, and Baltimore Railroad (already offered for the purpose) on November 1st., 1857.

The members examined a self-adjusting switch and a specimen of an approved method of constructing locomotives. The meeting then adjourned to 11 A. M., to-day.

#### THIRD DAY'S PROCEEDINGS.

The meeting was called to order at half past eleven o'clock, yesterday morning, Mr. Jackson presiding. After the reading and approval of the minutes, the Business Committee reported the following order of business for the day, which was adopted:

1. Appointment of Committees on Finance and Correspondence.
2. Mr. Hoagland on Improved Piston.
3. Mr. ——— on Wrought Iron Car Wheels.
4. Mr. Boardman on his Boiler.
5. Mr. Colburn on Axle Ties.
6. Mr. Sherry on Leonard's Dynamometer.
7. Mr. Starbuck on Waterman's Car Spring.
8. Mr. Herrick on Wood's Switch.
9. Mr. Heckrotte on his Car Couplings.
10. Mr. LaMothe's Car.

The Secretary reported on behalf of the Board of Managers who had assembled the evening before, that they would suggest the appointment of a Committee on Finance and Correspondence to hold office for one month. On motion, the Chairman appointed J. F. Headly, A. F. Smith, and A. L. Holly as such Committee.

The Secretary then explained, at the request of Mr. Hoagland, the peculiarities of an Improved Piston.

No one appearing to speak upon wrought-iron car wheels, which came next on the order of business, Mr. Boardman appeared to present the claims of his boiler to public favor. He exhibited a model by which he showed that the tubing was so arranged as to preserve it from the intense heat of the fire box. The tubes and their surroundings are placed below the line



*Resolved*, That if the people from Cuthbert to Fort Gaines will subscribe for stock in the Southwestern Railroad Co. to the amount of \$150,000—payable 33 per cent. on 1st February, 1857, and 67 per cent. on 1st February,



1858, and the subscription, as to its solvency and ability, shall be approved by this company—this company will (if the arrangement above mentioned to Cuthbert is perfected) proceed to build and extend their road to the Chattahoochee river at or near Fort Gaines.

*Resolved*, That if the people from Cuthbert to Eufaula, inclusive, will subscribe \$300,000—payable 33 per cent. on 1st February, 1857, and 67 per cent. on 1st February, 1858, and the subscription, as to its solvency and ability, shall be approved by this company—this company will (if the arrangement above mentioned to Cuthbert is perfected) proceed to build and extend their road to the Chattahoochee river opposite to Eufaula.

*Resolved*, That the preceding three resolutions are passed on the following conditions:

1st. That the pending negotiation for the incorporation of the road from Americus to Albany into this company is perfected.

2d. That this company shall find itself able to let the entire road, both to the Chattahoochee at or near Fort Gaines, and to the Chattahoochee opposite to Eufaula, so far as respects grading and wooden superstructure, for one-fourth cash, one-fourth company's 7 per cent. bonds, and one-half stock in the company; or one-third in stock of the company and two-thirds in company's 7 per cent. bonds.

*Further Resolved*, That the Board will consider the subscriptions, and say whether they are content with the same, in February next, when the first 33 per cent. shall have been paid.

*Resolved*, That any citizen of Randolph or Early counties (as these counties were in 1850) who has heretofore subscribed for stock in the Southwestern Company and forfeited the same, shall be allowed—if he renews his subscription before 1st February, 1857—the precise sum which he forfeited to the company, in the settlement of his new subscription.

True extract from the minutes.

JNO. T. BOIFEUILLET, Sec'y.

By subsequent action of the Board the 67 per cent. payable 1st February, 1858, so far as relates to the people of Terrell, Randolph and Fort Gaines, was made payable 33 per cent. 1st February, 1858, and 34 per cent. 1st February, 1859.

In February and March last subscriptions—made in conformity to these resolutions—were presented, and accepted by the Board. The subscriptions were for six thousand three hundred and thirty-three shares of one hundred dollars each, making \$633,300. Payment was made thereon as follows:

One hundred dollars per share on 1,139 shares.....	\$113,900
Thirty-three dollars per share on 5,194 ".....	171,402
Cash.....	\$285,302
Amount payable 1st Feb., 1858.....	259,156
" " " 1859.....	88,842
	<b>\$633,300</b>

The allowance made on account of old forfeited stock to parties renewing their subscriptions will not exceed \$3,300. The sum of \$625,000, contemplated by the resolutions of October, has thus been secured.

It was found difficult in March, when the subscription was completed, to let the grading of the road to any extent, and it was not possible, in consequence of the great rise in labor, provisions and mules, to get the work done at

the estimates of the Engineer. The Board being extremely solicitous to press on the work energetically, succeeded in letting the first six miles to Mr. D. W. Orr in March, and afterwards, in June, the road to Cuthbert was let to W. & B. G. Lockett, A. E. Thompson, A. Lockett and D. W. Orr. These contracts are payable two-thirds in bonds and one-third in atock. The contractors, who are all men of character and experience, are to finish the grading to Dawson by 1st April, 1858, and to Cuthbert by 1st April, 1859.

The Board expects to open the road for transportation and travel to Dawson by or before the 1st day of June next, and to Cuthbert by or before the 1st day of June, 1859. The Chief Engineer has advertised to be let 1st September next ten miles of road beyond Cuthbert towards Eufaula, and five miles of road towards Fort Gaines, and the expectation is that those additional fifteen miles will be opened as soon as the road is opened to Cuthbert. The rest of the road will be advertised to be let before the 1st day of January next.

Care has been taken to place the entire amount of cash paid on this extension at interest, on pledge of stock, to parties of the highest pecuniary responsibility. The Treasurer's statement will show the amount at interest under the head of "bills receivable for extension," and also the amount paid, so far, on account of the extension. Iron rails for sixteen miles of road have been contracted for—say 500 tons deliverable in Savannah on 1st December next, and 500 tons on 1st February next. The cost of these rails will be much lower than the Engineer's estimate. It is probable that the saving in cost of rails and chairs will considerably reduce the amount paid beyond the estimate for grading."

The Report of the Superintendent says:

"The year's operations of this road ending July 31st, 1857, have been as follows:

EARNINGS OF THE ROAD FOR THE YEAR.	
Up freight (Eastward).....	\$108,278 20
Down freight (Westward).....	108,735 80
Through passengers.....	64,581 46
Way passengers.....	66,451 82
United States Mails.....	11,517 44
Miscellaneous earnings.....	5,685 20

Total earnings.....	\$365,213 92
The current expenses of the year have been.....	165,316 58

Leaving a balance of net earnings of.....\$199,897 34

The expenditures for operating the road have been as follows:

REPAIRS OF ROAD.	
Proportion of salary of President, Treasurer, Superintendent and Supervisor; wages of overseers, watchmen at Flint river bridges, and hire of negroes for the year.....	\$38,099 41
"Materials"—Stringers, ties, bridge timber, &c.....	14,334 00
For tools, subsistence, clothing, physicians' bills for negroes, stationery, printing, &c.*.....	13,947 69

Total repairs of road.....\$66,381 10

FUEL AND WATER.	
Wood for locomotives and stationary engine.....	\$5,657 58
Pumping water, putting up new pumps and cisterns, repairs of pumps, cisterns, wells and cistern houses.....	2,034 10

Total fuel and water.....\$7,691 68

\*In this is included \$1,248 paid for negro killed by ditching train.

REPAIRS OF BUILDINGS,	
Including repairs of station houses and all other buildings.....	\$1,013 55
MAINTENANCE OF MOTIVE POWER.	
Repairs of locomotives, including proportion of salary of President, Treasurer, Superintendent and Master Machinist, wages of mechanics and laborers at shops, and all materials used for the year.....	\$11,475 52
Wages of runners and firemen.....	16,230 40
Oil, tallow and cotton waste for locomotives and stationary engine.....	1,709 91

Total maintenance of motive power.....\$30,015 83

MAINTENANCE OF CARS,	
Including proportion of salary of President, Treasurer, Superintendent and Master Carpenter; wages of mechanics and laborers at shops, wheels, axles, lumber, paints, and all other materials used in repairing and keeping in order passenger, baggage, mail and freight cars (new cars not included for the year.....	\$9,288 82
Oil, tallow, cotton waste, &c.....	1,576 70

Total for cars.....\$11,265 52

TRANSPORTATION EXPENSES,	
Including proportion of salary of President, Treasurer, Superintendent and Clerks; wages of conductors and train hands; salaries of Agents at Americus, Butler, Smithville and Wooten; laborers and watchmen at Macon, Americus, Smithville and Wooten freight houses and cotton yards; printing, books, stationery, &c., for the year.....	\$38,043 04
"Freight Damage"—paid for goods lost and damaged.....	263 83
Paid for cotton burned.....	1,628 63
"Stock Damage"—paid for cattle, mules, hogs, &c., killed and injured.....	1,472 00
"Agent Stations"—paid commissions.....	4,560 22

Total transportation.....\$45,967 72

INCIDENTAL EXPENSES,	
Including printing, advertising, books, stationery, postage, taxes, Court costs, attorney's fees, donations, gratuities, salary of Transfer Agent, and all contingent expenses not included under either of the above heads.....	2,976 17
Total current expenditures.....	\$167,316 58

Permanent expenditures have been made as follows since the last Annual Report:

Bridges, culverts, stations, &c.....	\$22,003 84
Cars, tools, depots, &c.....	27,505 70

Total.....\$49,509 54

Of the above amount \$2,300 was paid in stock.

Total earnings for the year have been \$365,213 92; total for previous year \$353,092 46; showing an increase of \$12,121 46. This gain is almost entirely from merchandise and passengers, to-wit: Merchandise (westward) \$15,790 26. Passengers \$21,966 96. Whilst eastward freight, principally cotton, has fallen off \$24,376 81.

The ordinary expenses of the year just closed are in excess of the previous year \$14,439 27. This was caused by the increased number of miles in operation, requiring a larger force on repairs, more runners and firemen, and more men in the transportation department. As the business of the past season was so irregular, we were obliged to keep a force prepared to do a much larger business had it offered, than was really necessary for doing the past year's business. Provisions, &c., for repairs of the road were considerably increased in cost over the previous year.

Ten miles of the Georgia & Florida Railroad, purchased by this company, was opened for use to Sumter City Station (though in an unfinished condition) December 1st, 1856. Three miles more were brought into use

\*In this is included \$715 83, judgment obtained for a negro who died on the road in June, 1854.



March 9, 1857, to Smithville (junction of the Cuthbert extension). Five miles further, to Station 10½ (Adams), was opened June 9th; and seven miles further, to Wooten's Station, No. 11, June 29th—making 25 miles, in all, below Americus, and within 10½ miles of Albany, to which place there are good reasons for believing the road will be finished on the 1st of October next.

As the road has been brought into use, our mail and accommodation trains have run regularly to and from the terminus.

The road from Americus to Albany, 36 miles, when the embankments are filled out and become settled, and the track put in proper adjustment, will be easily kept up and cheaply worked, in consequence of its being so very straight and generally light grades.

When opened through to Albany it must largely increase our business, both in passengers and freight.

Total bales of cotton transported during the year, 123,912, against 157,093 the previous year. By reference to the tables it will be seen that from the Southwestern Railroad proper there were 62,238 bales against 72,473 the previous year—being a decrease of 10,235 bales. From Columbus and stations on Muscogee Railroad there were 61,674 bales, against 84,620 the previous year, being a decrease of 22,946; making a total falling off for the year of 33,181 bales—caused, as I believe, entirely from the extreme short crop in the section tributary to our road.

Number of through passengers for the year 32,225; way passengers for the year 55,588; making a total of 87,813; being an average per day of 240, against 194 for the previous year.

Total number of passengers carried over the road since its opening, July 1st, 1851, 375,134; only two of whom have been injured: one in attempting to jump on the cars, and the other by jumping off in the track behind the train, which ran back over him.

No accident of a serious nature, involving life or limb, or material injury to the company's property, has occurred during the past year. By his own carelessness, a negro employed on the gravel train fell between the cars, was run over and killed September 20th, 1856.

Miles run by passenger and mail trains during the year were 113,809. Freight and other trains (exclusive of filling and graveling trains) 68,411. Total miles run, 182,220. Wood used by locomotives, 2,159½ cords; being an average of 84½ miles run to each cord of wood used."

**APPOINTMENT.**—George H. Ford has been elected Treasurer of the Michigan Southern Railroad, vice Mr. Hopkins, who has been appointed Treasurer of the Illinois Central Railroad.

### MICHIGAN CENTRAL RAILROAD CO.

Extracts of the annual report of the Michigan Central Railroad Company, made to the stockholders, May 31, 1857:

Fiscal year ends May 31:	1855.	1856.	1857.
Earnings from passengers.....	\$1,246,409	1,494,855	1,610,415
" freight.....	900,446	1,209,924	1,413,493
" miscellaneous.....	68,428	92,663	80,694
Gross earnings.....	\$2,245,285	2,800,443	3,104,603
Cost of operating the road, including taxes..	1,335,627	1,571,817	1,872,895
Net earnings.....	\$879,658	1,228,625	1,231,708
No. of way passengers.....	345,138	389,510	406,600½
No. of through passengers.....	158,636	161,270	187,029½
Total No. passengers.....	503,774	550,780	593,630
No tons freight moved.....	241,825	249,595	328,929
No. miles run by engines.....	1,292,739	1,576,871	1,679,178
Earnings per mile.....	\$1 71	\$1 77	\$1 85

The disbursements made during the year, and charged to the operating department, amount to \$2,083,199 36; in this sum is included the stock on hand belonging to that department, which exceeds the stock on hand a year ago by the sum of \$210,304 51, which, on being deducted, gives \$1,872,894 85, as the actual cost of operating for the year.

The business of the first half of the year has been very prosperous; that of the last half, aside from the late opening of navigation, has been temporarily reduced by the general causes of depression which have effected all the great east and west lines in the country. We may expect, with the autumn trade, a large and prosperous business.

The property of the company has never been in better condition than now. During the year 35 miles of iron have been re-rolled and put into the track, at the cost of income account; and when the new ties now on hand are all laid, they will have been renewed upon 200 of the 217 miles of road between Detroit and New Buffalo, beyond which the ties are of recent date. This will render this branch of our expenses quite light for some years to come.

There have been built and charged to car repairs during the year 37 eight-wheel freight cars and one twelve-wheel baggage car, to take the place of a like number which, from decay or other cause, have gone out of use.

There have also been rebuilt, at the expense of income account, five of our oldest locomotives, by which they are rendered more effective than when new, and better adapted to the wants of our traffic.

The rolling stock of the company has been so much increased during the last two years that the following schedule of comparison is inserted, as a matter of interest, in showing our enlarged capacity to meet any calls likely to be made upon our working capacity.

Statement of rolling stock on hand May 31, 1855, and May 31, 1857:

	1855.	1857.	Inc.	Inc.
			per cent.	
First-class passenger cars, 40 with 12 wheels, 1 with 8 wheels.....	41	66	25	61
Second class passenger cars, 8 wheels.....	8	12	4	50
Baggage cars with 12 wheels.....	4	9	5	125
Baggage cars with 8 wheels.....	10	14	4	40
Total covered freight cars, including emigrant cars, reckoning the 8 wheeled cars equal to 2 each, and the 4 wheeled cars equal to 1 each.....	1120	2082	962	86
Total open freight cars, reckoning as above.....	311	456	145	46
Number of locomotives....	64	92	28	44

At the joint expense of the Michigan Central Railroad, Illinois Central Railroad, Ga-

lena & Chicago Union Railroad, and Chicago, Burlington & Quincy Railroad Companies, their several lines have been connected by a direct road across the city of Chicago. This connection is of great value to this company, as it brings into our depot the passengers from large and important lines of road, and saves the cartage of the freight delivered to and from the various lines thus brought together.

The construction account has been increased during the year by the following items:

Freight house at Chicago and transfer house at same place.....	\$ 68,699 38
Large new engine house at Detroit.....	38 683 02
Enlargement of repair shops at Detroit.....	13,068 37
Enlargement of repair shops and engine house, Chicago.....	3,875 28
Other new buildings along the line.....	26,559 30
Expended on the Chicago Connection Railroad.....	38,803 69
Settlements of rights of way.....	6,555 74
New iron to be kept as a surplus to facilitate repairs, but to be kept good out of income account, by re-rolling what may be taken up, when any of it is, from time to time, laid down.....	152,767 34
Grading for freight house at Chicago, and for some of the new buildings at interior stations.....	8,945 07
New cars.....	226,892 85
New locomotives.....	96,634 80
Construction of telegraph.....	17,896 51
New bridges, extra cost of more permanent ones to take the place of wooden structures, an amount equal to the cost of the old ones having been charged to repairs.....	21,178 83
Outfit and improvement of the steamboat Mississippi, she being very deficient when purchased.....	15,161 30
Engineering and other expenses incident to construction.....	4,487 88
Total for year.....	\$740,284 36

We have six locomotives under construction, and a moderate number of cars, beyond which any material increase of construction does not seem probable for a considerable time to come.

### THE MICHIGAN CENTRAL R. R. CO. IN GENERAL ACCOUNT.

Dr. June 1, 1857.	
To capital stock.....	\$6,058,092 00
Bond account:	
Six per cent. sterling bonds, unconvertible.....	463,613 38
Eight per cent. sterling bonds, convertible.....	500,000 00
Eight per cent. bonds, unconvertible.....	97,850 00
Eight per cent. bonds, convertible.....	3,935,000 00
Income account—balance of this account.....	564,803 32
Unpaid dividends.....	704 00
Bills payable.....	1,450,824 49
Total.....	\$13,910,986 14

Cr. June 1, 1857.	
By construction No. 1—purchase of road.....	\$2,000,000 00
Construction No. 2—expenditures since purchase.....	9,848,956 78
Cash on hand.....	113,099 12
Assets in hands Oliver Macy, General Receiver.....	60,541 33
Assets in hands R. N. Rice, Superintendent.....	116,038 43
Assets in hands C. B. Swain, Steamboat Agent.....	56,467 24
New Albany & Salem Railroad Co. stock and bond.....	609,763 99
Steamboats.....	311,719 88
Joliet & Northern Ind. R. R. stock.....	186,842 37
Bills receivable.....	397,252 49
Materials on hand (in excess over last year).....	210,304 51
Total.....	\$13,910,986 14

### INCOME ACCOUNT—RECEIPTS OF ROAD.

Dr. June 1, 1857.	
To balance of this account, per Treasurer's Report of June 1, 1856.....	\$ 466,761 28
Receipts of road from June 1, 1856, to June 1, 1857, per statement C.....	3,161,889 28
Total.....	\$3,628,650 56
To balance of income account this day.....	564,803 32

Cr. June 1, 1857.	
By dividend declared June 18, 1856, 5 per cent.....	\$ 301,695 00
Dividend declared December 16, 1856, 5 per cent.....	302,855 00
Operating and interest account from June 1, 1856, to June 1, 1857.....	2,459,397 24
Balance to new account.....	564,803 32
Total.....	\$3,628,650 56

(See page 470.)



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Date of Int'rt.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds	Name of Company.	Quot' of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al'xandria, Lon. & Hamp'sr	173	5,000,000.00					
498,800	6			1862-3	2d "	.....	Androscog'n & Kennebec	54.55	1,400,000.00			209,475.46	170,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange..	86.5	1,000,000.00	199,000.00		278,123.74	173,780.74	4 pr. ct. 6m
53,648	6			now	"	.....	B'ng'r, Old T. & Millford..	12.5	135,000.00	52,646.26		39,104.40	8,671.61	8 pr. ct.
500,000	7		N. Y.	1860	"	.....	Boston & Worcester..	44 5-8	4,500,000.00	500,000.00		1,106,781.90	437,032.03	15,000 in 1/2
500,000	7			1857-9 62	1st mortgage.	.....	Buffalo & State Line....	"	1,300,000.00					5 pr. ct. 6m.
300,000	7			1864	Domestic.	.....	"	"	"					
200,000	7				4th mortgage.	.....	Central Ohio.....	"	"					
577,187	6			1872	1st mortgage.	.....	Champlin & St. Lawrence	43	1,872,800.00	1,001,067.00		163,200.00	77,700.00	10 per ct.
192,200	7			1874	2d "	.....	"	"	"					
380,000	7				Domestic.	.....	Ch'r'l'te & South Carolina..	110	1,700,000.00	380,000.00		291,219.86	47 per ct.	\$72,300
1,440,000	6-7-8		N. Y.	4-7	1st mortgage.	.....	Ch'go, Burl'gh'n & Quincy.	138	3,746,900.00	3,114,009.00		1,095,185.00	571,725.23	15 pr. ct. 6m
1,200,000	8			8-9	2d "	.....	"	"	"					
374,000	8			8-76	Convertible.	.....	"	"	"					
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa..	"	"					
532,000					2d "	.....	Cin. W'p'ng'n & Zanes'ville	132	1,761,149.16	2,241,500.00		221,491.96		
104,000					3d "	.....	"	"	"					
305,500					Income.	.....	"	"	"					
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	139	4,741,320.00		1	3,754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning..	85	1,500,000.00					
400,000	7			1864	2d "	.....	"	"	"					
0,000 0				1873		.....	Cumberland Valley.....	52	1,218,300.00			160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	52	1,000,000.00	1,000,000.00		665,578.79	288,078.84	\$234,133
350,000	7				1st mortgage.	.....	Eastern Railroad.....	93 10	3,343,000.00			30,897.30	19,092.30	
740,000	10			1869	1st "	.....	East Ten. & Virginia....	130	625,450.00					
88,000	10			1861	2d "	.....	Essex Railroad.....	20	700,000.00					
400,000	10			1864	1st mortgage.	.....	Evansville & Crawf'd'vle	109	2,228,657.00			243,970.42	130,061.90	\$133,281.45
200,000	10				1st mortgage.	.....	The Fitchburg (Mass.) R.R.	20	3,540,000.00			681,162.52	213,837.81	3 per cent.
100,000	6				1st mortgage.	.....	Fox River Valley.....	23	800,000.00					
100,000	6				1st "	.....	Fair Haven Branch.....	15	300,000.00			50,381.33	14,822.45	\$166,240.00
300,000	6				1st "	.....	Georgia RR & Banking Co.	233	4,156,000.00			1,068,202.50	357,659.42	\$166,240.00
4,000,000	6 1-9			1858	1st "	.....	G't Falls & Conway R.R.	20				27,376.69	14,207.07	
2,000,000	7			1869-70	1st "	.....	G't West'n R.R. of Can.	281 1/2	4,191,550.00			2,062,836.00		8 pr. ct.
1,812,000	7			1860	2d "	.....	Housatonic Railroad.....	74	2,000,000.00			339,196.50	176,329.90	
12,485,000	7			1875	3d mortgage.	.....	Hudson River.....	144	4,000,000.00			1,924,382.44	718,037.40	
4,115,000	6			1875	1st "	.....	"	144	4,000,000.00					
3,000,000	7			1860	1st "	.....	Illinois Central R.R.	704	18,453,376.00			1,476,035.27	1031,459.08	7 pr. ct.
600,000	7	Nov. 1.			Freeland.	.....	"	704	3,558,376.00					
700,000	7	Jan. & July 1		1862	1st mortgage.	.....	Indiana Central.....	72 4-				351,871.00		3 pr. ct.
50,000	7				2d "	.....	"	"	"					
700,000	7				1st mortgage.	.....	Iron R.R.....	13	123,700.00					
					2d "	.....	Kentucky Cen. 2d Div..		719,500.00					
218,000	7			1866	1st "	.....	Knoxville & Kentucky..	39	166,000.00			23,233.59	14,233.59	
1,000,000	7			1875	2d "	.....	Laurens (S. C.) R.R.	184				50,234.71	14,149.13	\$8,000
1,000,000	6				1st "	.....	Louisville & Nashville..	12 35-	300,000.00			587,236.57		10 pr. ct
2,000,000	6				2d "	.....	Lowell & Lawrence.....		2,697,090.00				162,277.50	
2,500,000	7			1868	1st "	.....	Mad River & Lake Erie...		2,697,090.00					\$24,000
2,000,000	7 and 8			1867	2d "	.....	Manchester & Lawrence..	26	1,000,000.00					
60,000	8			1867	1st "	.....	Marietta & Cincinnati...							
420,000	8				1st mortgage.	.....	Mexican Gulf R.R.....	27						
329,000	8			1881	1st "	.....	Milwaukee & Horicon...	30						
320,000	8			1-68	2d "	.....	Mineral Point R.R.....	32						
6,000,000	6			1884	1st "	.....	"	32						
500,000	7			1869	1st mortgage.	.....	Mobile & Ohio.....	497	10,000,000.00			253,498.96	162,862.24	7 pr. ct.
2,356,000	7	May & Nov.	N. York		1st "	.....	Nashua & Lowell R.R.	15	600,000.00			191,752.42	55,501.74	2 pr. ct. 6m
8,892,600	0	June & Dec.	N. York	1864	Con. till 1859.	.....	New Haven & North'm'tn	55	922,500.00				3,609,481	3 pr. ct. 6m
3,000,000	7			1873	1st mortgage.	.....	New York Central.....	555	23,067,400	14,763,897		7,707,348	324,891.57	
926,000	7			1864	2d "	.....	N. Y. & Harlem R.R.	153	5,717,100.00			1,040,593.26	64,678.71	\$37,692.30
411,700	6			1863	1st "	.....	" " " " " Pref.					245,713.00	51,544.40	
500,000	6				1st "	.....	N. Y., Prov. & Boston...	50	1,580,000.00			120,371.50		\$25,000
300,000	6				2d "	.....	N. Lon., Willim'tn & Pal.	66	1,700,000.00					
1,500,000	6			1873	1st mortgage.	.....	Pontchartrain R.R.....	5	500,000.00					
1,000,000	6			1873	2d "	.....	N.O., Opelosa & Gr. L. West.	62 1/2	6,000,000.00			116,795.00	366,118.80	7 pr. ct.
2,000,000	6			1-85	3d "	.....	N. Y. & New Haven.....	103 1/2	3,000,000.00			1,007,666.48		
1,500,000	7			1859	1st mortgage.	.....	North Western Va. R.R.							7 pr. ct.
3,000,000	5			1877		.....	Northern (N. Y.) R.R....	118	2,000,000.00			600,000.00	88,458.56	2 1/2 pr. ct.
419,701	6			1860		.....	North Missouri R.R.	19 2-				25,176.74		
221,800	6					.....	Norwich & Worcester RR	60	2,111,500.00			304,236.33		
400,000	6			1866	1st mortgage.	.....	Ogd'nsh'g. Clay't'n & Rome	94				289,690.10	137,875.93	5 pr. ct.
1,200,000	7			1875	2d mortgage.	.....	Ontario, Simcoe & Huron	83 3-	2,957,500.00			276,539.02		
300,000	8			1873	1st "	.....	Orange & Alexandria R.R.	47	1,500,000.00					6 pr. ct.
300,000	6			1861	1st mortgage.	.....	Peoria & Bureau Val. R.R.							
1,260,000	6			1864 to 1874	1st "	.....	Philadelphia & Trenton..	28 1-5	1,000,000.00					
350,000	6			20 years.	1st mortgage.	.....	Portsmouth & Concord..	47						
800,000	7				1st "	.....	Potsdam & Watertown..	76	2,000,000.00			68,523.42		
1,500,000	6				1st mortgage.	.....	Rutland & Washington..	62 1/2	950,000.00					
500,000	6				1st mortgage.	.....	St. Louis & Iron Moun. R.R.	86	6,000,000.00					
250,000	6				1st "	.....	Salem & St. Louis R.R.	168 3/4	400,000.00					
317,000	6				2d "	.....	Snd'sky, Mans'd & New'k	116					19,050.64	
300,000	7				1st mortgage.	.....	Sullivan Railroad.....	20	500,000.00			75,246.06	17,378.08	11m. 12 pr. ct
198,000	7			1861	1st mortgage.	.....	Tennessee & Alabama...	145				39,586.44		
292,000	7			1840	2d "	.....	Terre Haute & Richmond	73	1,294,450.00					
2,500,000	7			1875	3d "	.....	Toledo, Wabash & Western	242	1,000,000.00					
					1st, 2d, 3d "	.....	Troy & Boston.....							
					1st "	.....	Vicksburg & Jackson....	46						
					2d "	.....	Virginia & Tennessee...	215	3,000,000.00			322,048.60		2 pr. ct.
					1st mortgage.	.....	Westchester (Pa.) R.R.	31	165,000.00					
					2d "	.....	Wilmington & Manchester	171						
						.....	Winchester & Potomac...	32						
						.....	Worcester & Nashua....	45 69-						



# LONDON QUOTATIONS OF AMERICAN STOCKS AND BONDS.

July 31st, 1857.

Bclvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort. conv. 1858, ..	"	80
Ctn. Ham & Dayton, 2d mort., conv. ....	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	60	64
Erie, 3d Mortgage, 1863, ..	73	82
" Sinking Fund, ..	73	78
" conv. 1862, ..	62	67
Grand Trunk (Canada) Debenture, ..	87	88
Great Western " conv., ..	107	109
" " non-conv., ..	109	113
Illinois Central, 1st Mort., 7's, ..	87	88
" " with option 70 per cent. shares till Jan. 1858, ..	103	106
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	82	84
Little Miami 1st Mort. not conv. 0's, ..	"	"
Marietta and Cincinnati, 1st Mort., ..	90	91
Michigan Central, conv., 8's, 1860, ..	90	91 1/2
do do do 1869, ..	80	82
N.York Central. No Mort. Not conv., 6's conv., 7's, ..	89	91
Ohio and Mississippi, 1st Mort., ..	65	68
Ohio and Pennsylvania, Income 1872, ..	86	88
Panama. No mort. conv. 1866, ..	90	95
Pennsylvania, 1st Mort., conv., ..	90	95
" Sterling, 2d Mort., ..	"	"
Steuenville and Ind., 2d Mort., ..	"	"

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent.

## MONETARY AND COMMERCIAL.

The past week has been devoted mainly to ascertaining the true state of things in regard to the suspended banks. Very little new business has been transacted, and little will be attempted till the real condition of things is fully known. The suspension of the Ohio Life Insurance & Trust Co. is pretty generally conceded to be a failure of a pretty bad character. Nothing has yet transpired by which we can judge of the actual indebtedness of the company in New York. It is generally believed to be some two or three millions more than its assets. The silence of the company on this subject argues its inability to make a full and explicit statement, which we trust will be made at the earliest possible moment. The Central Bank, of this city, expects to resume as soon as its assets in the hands of Beebe & Co. can be secured.

Regular business in discounts is suspended, and quotations can hardly be made of rates. Eastern exchange has ranged from  $\frac{3}{4}$  to  $1\frac{1}{2}$  per cent. Gold is at  $1\frac{1}{4}$  premium.

The small amount of inconvenience experienced by our merchants in consequence of the bank difficulties, and the few failures noted, is an evidence of the soundness of the business interests of the West.

At New York things are still unsettled, and it is impossible to predict the changes that may transpire. Matters are, however, more satisfactory than at our last dates.

Stocks are unsettled. Transactions are not large and prices feverish.

We omit our Cincinnati quotations to-day.

### SALES AT THE NEW YORK STOCK BOARD—Sept. 7.

\$2,000 Indiana State 5's, ..	74
2,000 Tenn. State 6's, '90, ..	76
7,000 Virginia 6's, ..	89 1/2
7,000 Missouri State 6's, ..	74 1/2
5,000 California State 7's, 1870, ..	57
1,000 Erie R. C. Bonds, 71, ..	50 1/2
3,000 Illinois Central R. R. Bonds, ..	88
3,000 Terre Haute and Alton 2d mort. Bonds, ..	46
207 shares New York Central, ..	70 1/2
23 " Del. & H. C. Company, ..	110 1/2
63 " Penn. Coal Co., ..	74 1/2
100 " Cumberland Coal Co., ..	13 1/2
100 " Erie, ..	22 1/2
100 " Cleveland & Pittsburg, ..	18
700 " Reading, ..	54
100 " Harlem R. R. stock, ..	7 1/2
103 " Mich. Cent., ..	66
400 " Mich. S. & N. Ind., ..	23 1/2
100 " do do do pref., ..	47
20 " Clev., Col. & Cin., ..	90
175 " Galena & Chicago, ..	80
100 " Cleveland & Toledo, ..	38 1/2
50 " Chicago & Rock Island, ..	79 1/2
100 " Milwaukee & Miss., ..	37
225 " LaCrosse & Milwaukee, ..	16 1/2
20 " Pacific Mail St. Co., ..	71

The following is the official statement of the July receipts of the Pittsburg, Fort Wayne & Chicago Railroad Company:

From Freight, ..	\$46,064 79
Passengers, ..	69,114 51
Mail, ..	4,493 75

Total, ..	\$119,673 05
Total earnings of the line from Pittsburg to Columbia for same month last year, ..	101,003 26

Increase (18 1/2 per cent.), .. \$18,669 79

Total earnings for year ending July 31, '57, ..	\$1,732,339 38
Expenditures, ..	879,078 13

Net earnings, .. \$853,261 25  
Being a fraction less than seven per cent. on the cost of the road, viz: Capital stock, funded and floating debt; say \$13,000,000; or seven per cent. on the funded debt, and leaving a balance of \$434,000 applicable to interest on floating debt and dividend.

## FOREIGN COMMERCE OF NEW YORK.

### EXPORT STATEMENTS.

Exports from New York to Foreign Ports in the Month of August.

	1855.	1856.	1857.
Domestic Mdse., ..	\$4,281,481	\$5,612,828	\$4,289,479
Foreign Mdse. dutiable, ..	222,176	211,933	654,088
Foreign Mdse., free, ..	151,482	88,242	393,882
Total Mdse., ..	\$4,655,139	\$5,913,001	\$5,337,449
Specie, ..	2,609,393	3,202,053	6,271,717

Total exports, .. \$7,264,532 \$9,115,056 \$11,609,166

There is nothing in the above statement to excite comment, except the large increase in the export of specie, both in comparison with the corresponding month of last year and the month of July last. But notwithstanding this increase, the export of specie in July and August, 1857, amounted to less than ten millions of dollars, while in the same time 1856, the export exceeded that sum more than a million. A large increase in the export of Foreign Merchandise makes up a total merchandise export nearly equal that of last year. This feature in our export tables has prevailed for some time, and is an eloquent commentary upon the wide spread business of our city.

Exports from New York to Foreign Ports, from January 1 to September 1.

	1855.	1856.	1857.
3 mos. end. April 1, ..	\$16,802,522	\$19,800,683	\$19,838,867
3 mos. end. July 1, ..	15,627,930	20,250,346	18,633,416
2 mos. end. Sept. 1, ..	9,001,723	12,945,315	10,600,901
Total Mdse., ..	\$41,432,175	\$52,996,344	\$49,073,184
SPECIE, ..			
3 mos. end. April 1, ..	\$4,578,883	\$3,893,573	\$5,314,637
3 mos. end. July 1, ..	12,495,692	8,236,273	17,083,425
2 mos. end. Sept. 1, ..	5,532,717	10,973,954	9,900,094
Total specie, ..	\$22,607,292	\$23,003,800	\$33,298,156

Total exports 8 mos. \$64,039,467 \$76,000,144 \$82,371,340

The extraordinary depression in the export of the great staples of the country, which has been felt in the last two months, is the cause of the unfavorable aspect of the above exhibit; but, with the revival in the export of bread-stuffs, which it is now apparent must take place—indeed, has already commenced—a change for the better must be evident in future reports.

## HARVARD DEGENERATE.

The following from the Boston Traveller would indicate that there had been some serious defect in the early education of one of the professors of this institution. He could not have been thoroughly trained in punctuation and in the instance here cited, forgot to place quotation marks to his extracts:

A SCIENTIFIC QUARREL.—In the last number of the *Christian Examiner* a statement was made, apparently "by authority," giving some account of a "fine discovery" by Prof. Pierce of Cambridge, which proved that the form of the continents, and their upheaval

above the sea, had been determined by the action of the sun upon the earth. The statement from the *Christian Examiner* was very generally copied by the press, and is still in circulation, erroneously credited, we observe, to the *Christian Enquirer*.

We copied, in common with other journals, the statement in question, the appearance of which in our columns has called forth a letter from Dr. C. F. Winslow, of Troy. Dr. Winslow is a gentleman of the highest respectability, and of unquestionable scientific acquirements. He claims for himself the discovery which the *Christian Examiner* attributes to Professor Pierce, and substantiates his claim by reference to publications of his which were printed some three or four years ago. The titles of these works, both of which were published by Messrs. Crosby, Nichols & Co., of this city, are "Cosmography, or Philosophical Views of the Universe, by Charles F. Winslow, M. D.;" and "The Preparation of the Earth for the Intellectual Races, a Lecture delivered at Sacramento, California, April 10, 1854, at the invitation of the House of Assembly."

In his letter to the *Traveller*, Dr. Winslow states that he carried his first book containing the suggestion and proof of this "fine discovery" to Cambridge in 1853, and left in person a copy of it at the house of Prof. Pierce. He also states that he presented and read to the American Association for the Advancement of Science, which met at Albany last year, a paper suggesting and proving the sun to be the cause of earthquakes, volcanos, and the upheavals of continents and islands, which paper he declares, was suppressed, and not allowed to appear in the published proceedings of the Association—not even by its title. The greater portion of his MS., thirty pages or more, containing his facts, reasonings, and conclusions, to prove that the sun is the cause of the upheaval of continents, Dr. Winslow complains has not been returned to him, but is still retained by the publishing committee, which consists of Professors Lovering, Pierce, Agassiz, and Horsford, of Cambridge, by some of whom, he intimates, his ideas are put forth as a Cambridge discovery—as a discovery by Professor Pierce.

This is obviously a grave charge, and one that if not promptly and satisfactorily met by the Cambridge gentlemen, will damage them as essentially in scientific circles as their late "investigation" has in spiritual circles. Dr. Winslow writes with spirit and piquancy, and his statements, if not refuted, cannot fail to make a deep impression on the public. His egotism is amusing.

## To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great Wabash River, in White county, and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.



(Continued from page 467.)

At a meeting of the Directors of the Michigan Central Railroad Company, held in Boston, June 16th, it was voted:

That a dividend of five per cent. be, and the same is hereby declared, payable on the first day of July next, to such stockholders as shall be registered on the books of the company at Boston or New York at the close of business on the 20th day of the present month; and on the 1st day of August next to such stockholders as shall be registered on the books of the company in London at the close of business on the 1st day of July next.

Payment to be made to stockholders residing in Michigan, and not registered at New York, at the office of the General Receiver in Detroit; to holders of stock registered in the city of New York, at the office of the Farmers' Loan and Trust Company; to holders of stock registered in the city of London, at the Union Bank of London; and to all others, at the office of the Treasurer, in the city of Boston.

#### COMPARATIVE ADVANTAGES OF RICH AND LEAN ORES IN THE BLAST FURNACE

We have frequently alluded to the great advantage of using rich over poor ores in the blast furnace, and have had our attention again directed to the subject by the results of some workings at Sharon Iron Company's furnace, as extracted from their books for us by their President, Mr Kimball.

While working the Mercer county, Pa., ore a lean argillaceous kind, of about 35 per cent. richness, the cost of making forge pig iron was as follows.

##### CHARGES FOR TWENTY-FOUR HOURS.

72 charges coal, at 500 lbs each—36,000 lbs. at \$1.75 per ton.....	\$31.50
72 charges ore, at 330 lbs. each—23,760 lbs. at \$3.00 per ton.....	36.00
72 charges limestone, 110 lbs each—7,920 lbs. at \$1.50 per ton.....	6.00
Labor and contingencies.....	20.50
<b>Total.....</b>	<b>\$94.00</b>

The product of the twenty-four hours working with these charges, was only four tons of hard white iron, suitable for the forge, making the cost of production \$23.50 per ton.

This same furnace, working, as it is at present on Lake Superior ore, from the Jackson iron mountain, take in the twenty-four hours:

106 charges coal, at 400 lbs. each—42,400 lbs. at \$1.75.....	\$37.12
106 charges Lake Superior ore, at 300 lbs. each—32,000 lbs. at \$9.....	144.00
106 charges lime, at 36 lbs each—3,816 lbs. at \$1.50.....	2.94
Earth flux.....	50
Labor and contingencies.....	\$20.08
<b>Total.....</b>	<b>\$304.64</b>

The produce with these charges, is 12 tons in twenty-four hours, being thus made at a cost of \$17.05 per ton. So that, although the Lake Superior ore costs \$9 per ton, delivered at the furnace, while the Mercer county ore can be had for \$3, yet the cost of producing one ton of iron from it, is actually \$6.45 less; or if we suppose iron of this quality to be selling in the market for \$24 dollars per ton, the profit on a day's work with the Mercer co. ore would be only \$2 while the produce for the same time from Lake Superior ores would realise a net profit of \$83.40! But the difference is in reality greater than this: for while \$24 is quite as large a price as can be obtained for Mercer co. iron of this

quality, Lake Superior pig for the forge readily brings at the least \$26.

In the present instance then, we find the case of poor, *versus* rich ores, to stand about thus: with the first, a daily profit of \$2, or the rate of \$730 a year; with the latter, a profit of \$107.40 per day, or nearly \$40,000 per year.

To thoroughly practical furnace men, there is no occasion for us to say much as to the causes of this startling difference in the working the same furnace with different ores; the one yielding a profit so small as to be almost a loss, the other affording splendid returns for the capital invested. The upshot of it all is, that furnace owners must use the richest ores they can procure, and not expend their fuel nor the time of their furnace in melting down the great per centage of earthy matter contained in the leaner ores; otherwise they will be unable to compete in price or quality with those using the richer ores. We have seen piles on piles of ore at different furnaces, containing full 25 per cent. of clayey matter, capable of being removed by simply washing, at cost of 50 cents per ton, thus making the ore so much richer; but was preferred instead, to tumble it all into the furnace and spend perhaps \$5 or \$6 per ton, or more, in melting up this worse than useless material. Perhaps the perusal of this article may induce some of our friends to mend their ways in this respect.—*American Mining Chronicle.*

#### WROUGHT IRON BEAMS AND JOISTS

BY W. FAIRBAIRN, F. R. S., C. E.

*Abstract of Report to the Board of Trade, on the Paris Universal Exhibition.*

In the manufacture of wrought iron beams and joists the French have taken an undoubted lead; and the specimens exhibited from the Forge et Fonderie de Montataire and others, at the late Paris Universal Exhibition, indicated a degree of perfection which has not as yet been obtained in this country. These specimens, which are of different sizes, showed how much has been done, and how much may yet be accomplished in this branch of manufacture; and we have yet to learn why the same facilities cannot be afforded for the introduction of this class of work direct from rolls by the iron makers of other countries. If this description of beams were properly rolled and manufacture, it would, effect a great saving in mechanical construction, and would, at the same time, produce much greater certainty in the strength of beams, by dispensing with the present system of joints, and the riveted angle iron, which constitute at the present moment our defective modes of construction. It would introduce also into our present system of manufacture, a new and greatly enlarged branch of industry, adapted to all the requirements of the architect, the builder, and the engineer.

The introduction of this new description of beam, if properly prepared, would establish a new and important era in the history of constructive science, as it would supply architects, and engineers with an article on which they might safely depend for durability and power of resistance to strain; which would not be liable to dry-rot, sap, or any of the destructive diseases to which timber is subject; and would be free from oxidation when kept dry and imbedded in plaster. This is shown by the construction of floors, in constant use in Paris. Besides a building so constructed possesses the advantages of being fire-proof, strong and secure.

It may here be stated, that the floors of all the better class of houses in Paris are now built with iron joists, placed at distances varying from 2 feet to 2 ft 6 in. asunder. Some of these floors supported on iron joists are 30 feet wide. At about every 3 ft., 6 in. cross tie rods are placed, on which rest slender wrought iron rods  $\frac{1}{2}$  inch square, three between each joist; these rods are run through perforated bricks. These bricks are built in a slightly arched manner, and the space below them filled with plaster, forming a perfectly solid floor. Across these rods and arches, wooden sleepers are placed to receive the boarding for the floors, leaving a hollow space between joists. In this kind of floors there is every security from fire, and the plaster being a bad conductor of heat, equalizes the temperature of the room. The only objection is the open space between the arches and the boarding, serving as a receptacle for vermin. This objection might be removed by divisions of plaster 6 in. thick carried across the floor and in contact with the boards. This description of building is in general use in Paris and most other towns of France, and viewing it as a permanent fire-proof structure, I should earnestly recommend its adoption in this country.

In the manufacture of malleable iron beams in France sufficient attention has not been paid to form, in order to attain the section of greatest strength. The French Philosophers and engineers are fully aware of the experiments made in the year 1845, for investigating the strength and form of iron beams in order to establish the principle on which the Britannia and Conway tubular bridges should be constructed.

The formulæ deduced from these experiments are well known in France, and up to the present time have been used for similar constructions. They proved that wrought iron beams followed a totally different law in their resistance to strain, to cast iron; that in wrought iron beams the area of the bottom flange requires to be little more than one-half of the top; while in cast iron beams the area of the bottom flange should be six times that of the top flange. This difference arises from the great resistance which wrought iron offers to a tensile strain, and its comparatively inferior resistance to compression. Cast iron, on the other hand, possesses a higher power of resistance to compression, and defective resistance to tension.

The following table of resistances will show how the material should be distributed, in order to obtain the maximum of strength with the minimum or at least required quantity of material:

The resisting power of—

	To Tension in tons.	To compression in tons.
Wrought iron plates is.....	23	12
Copper.....	16	3
Cast iron.....	8	51

From the above it is evident that to obtain the maximum strength in a wrought iron beam from the least quantity of material, the area of the top flange should be nearly double that of the bottom. It is desirable to make the top flange as broad as possible, for the purpose of giving the beam lateral strength, and in this form the useless material now given to the bottom flange would be saved.

In other description of manufacture, such as railway bars, angle iron, T-iron, and other varieties, we are in advance of other nations, though in beams and joists, like those so extensively used in France, we are far from perfect.



## THE RAILROAD SYSTEM.

It is obvious from the state of our railway finances that a reform in this department is sadly needed. Most of our American roads pay no dividends on their stocks, while others have to increase their floating debts to make up the interests on their bonds. All of which not only aggravates the strictures of the money market, but militates against every new enterprise, retarding and obstructing the general progress of the country. And this is the worst feature of our present system of railway finances, for the question of dividends and interests appears insignificant when compared with the chief purpose of railroads—the promotion of productive industry and commerce. It is a matter of the utmost consequence that means should be devised to make our railroad system, throughout, a self-sustaining interest. According to statistics compiled in 1855, there were, at that time, 19,936 miles of railroad completed in the United States, while 16,069 miles remained unfinished. The financial condition of these works is stated as follows:

Capital stock.....	\$433,386,946
Bonds issued.....	303,136,973
Floating debt.....	40,124,958

Total.....\$776,551,877

The gross receipts were.....\$91,182,693  
Of these were required for working expenses 48,712,361

Leaving net profits.....\$42,470,312

which is less than  $5\frac{1}{2}$  per cent. on the entire capital invested. It may be assumed that on an average 7 per cent have to be paid on bonds and floating debts, if not much more on the latter, in default of which the road would be sold under the hammer. The interests on bonds and floating debts, amounting, then, to \$25,028,545, there remain no more than \$17,441,767 to be distributed among the holders of \$433,000,000 of stocks. Bonds being best secured, \$74,000,000 of them are in the hands of foreigners, who have bought them at from 10 to 30 per cent. below par, while only \$9,000,000 of stocks are owned abroad. About 1-5th of the net profits of our entire railroad system goes to Europe, reducing our financial resources and diminishing our capacity to place this important interest upon a self-supporting basis. The argument in favor of foreign loans,—that our railroads can afford to pay the high rates of interests claimed, is a fallacy, since it is clear that they cannot be paid without depriving the stockholders of their dues. The stockholders, that is to say, the original projectors and *bona fide* subscribers, who first risked their money in the enterprise, and deserve to reap the first rewards, are under the working of our system the greatest losers. The fact necessarily operates against the further extension of railroads, and is therefore most pernicious in its tendency. No adequate dividends being paid, the stockholder sells his scrip at a greatly depreciated value, which thus becomes the stock in trade of gamblers, who having no other object than to swindle their stock up, manage the business of the road in a manner to accomplish that special purpose, regardless of every solid interest. This sort of speculation is the greatest curse of modern civilization. The sudden fortunes made by some are invariably built upon the wreck and ruin of others. Now, the distinction between stocks and bonds is not founded on absolute necessity. Were there but one description of paper, representing the real and actual value of the road, as determined by its proceeds, which being in the hands of people

directly interested in the prosperity of the enterprise, and directly exercising control over it, it would restrict speculation to narrow limits, secure better management, and give a sound basis to our railroad finances. The plan is by no means impracticable. Let correct estimates be made of the costs of construction so as to avoid the necessity of contracting loans, such as finally exceed doubly or trebly the original estimate, there would then be but one description of paper, the holders of which would be united by a common bond, while small loans on interests might easily be settled.

Means might also be found to avoid the contracting of heavy debts, and sale of scrip much below its par value abroad. We have abundance of land, which can be made a basis of operations to secure the means for the construction of new roads. The principle already introduced into practice, of inducing landowners to sell for stock, at reasonable prices, portions of their estates, such as would be benefited by the completion of the road, is capable of further extension. The lands thus acquired by the company will rise in value with the progress of the enterprise, and their sale may, under these circumstances, furnish a considerable portion of the cost of the road.—*Pennsylvania*.

## THE ATLANTIC CABLE.

We copy from the *National Intelligencer* the following article on the above subject from the pen of Lieut J. M. Brooke, U. S. Navy.

The late unfortunate result of the attempt to lay the telegraph cable has given rise to serious doubts as to the eventual accomplishment of the project. The papers of the day teem with fanciful suppositions as to the causes of the mishap. It may be shown, however, that neither mysterious nor insurmountable obstacles are opposed to a successful result; for, in every particular, the circumstances attending the operation—the movement of the cable, the temporary interruption of the passage of the electric fluid, and the parting of the cable, in a certain contingency—were clearly indicated several months ago. In the essay "Ocean Telegraph," published in the *Intelligencer*, and from which quotations bearing on the management of the cable have been recently made, the tendency of the cable to sink in the direction of its inclination was pointed out, and in this "back-set" is found a satisfactory explanation of the remarkable under-currents that, refusing to touch the deep-sea sounding lines, laid in wait to seize and bear away the cable on which hung the hopes of nations. The principal which enables us to beat to windward, by inclination of surfaces, consequent decomposition and re-composition of forces, applies as well to the descending cable, as the sail-boat, which "eats into the eye of the wind."

We may reasonably anticipate waste if a cable be permitted to descend at an inclination of perhaps thirty degrees from the vertical—seeking the swiftest line of descent—approximating the cycloidal curve. And the secret of the apparently anomalous interruption of continuity lies in the following paragraphs of the essay:

"It remains to be seen, in practice, whether these various materials have been most advantageously combined.

Suppose that the copper and iron wires were straight and parallel; in that case, since

the relative ductility of these metals is about as four to five in favor of the copper, the iron wires would practically bear the strain, relieving the copper; and this without regard to change or form in the core of gutta percha. But in the cable now in process of manufacture the outer wires make two whole turns to the foot. It becomes then a serious question, whether by strain, or the pressure of five or six thousand pounds to the square inch, the core will be compressed or altered in form. The water penetrating between the iron wires will surround each part of the cable, and on them, individually, exert its powers of compression. If the gutta-percha yields, the iron wires will become loose—will extend—and the strain will come on the straight copper, drawing it; and, although it may yield twenty per cent to its length without breaking, any such process involves risk.

"The character of the curve assumed by the cable on its way to the bottom will depend upon the velocity of its descent and the speed of the ship.

"If the cable, when extended horizontally upon the water, sinks faster than the ship runs, the convexity of its curve will be towards the bottom; the upper portion, nearly vertical, will descend more directly, and therefore more rapidly towards the bottom: the lower portion will consequently be deposited in waves upon the bottom.

The conducting wires broke; the gutta-percha stretching with the outer wires, drew the broken ends apart, and continuity was thus interrupted.—But when that portion of the cable approached the bottom it became slack. "The cable will be deposited in waves upon the bottom." Then the gutta percha, relieved of the strain, by virtue of its elasticity contracting, drew the broken, separated ends of the conducting wires together, and continuity was re-established. The re-establishment of continuity is a striking proof of the fact that the conducting wires were broken, while the gutta percha remained unharmed. Had it not been re-established the interruption would have been generally attributed to abrasion of the gutta percha, and the error of construction would have remained unexposed.

In view of these facts, fulfilling as they do, even in detail, predictions made months ago, forming part of an essay which, upon equally good grounds predicts the eventual accomplishment of the enterprise, we may feel assured that on a day not far distant we shall have a living ocean telegraph.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

feb19-1m

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M. for Indianapolis, connecting with all Trains for h South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntington, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup. t.  
L. N. ANDREWS, Gen. Fright. Agt.  
Indianapolis, Sept. 16, 1856. [mh29-1y.



## The Polytechnic College of the State of Pennsylvania.

WEST PENN. SQUARE.

The Polytechnic College, incorporated by the Legislature, 1853, on the plan of the industrial Colleges of Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

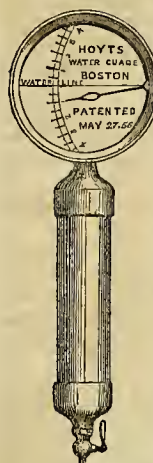
Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to DR. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia.

Aug. 20—6t

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

jy30

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building;

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery.

Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building.

jy9-2m

## SAFETY & ECONOMY.

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.

dec11 Second avenue, corner of 22d street, N. Y.

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

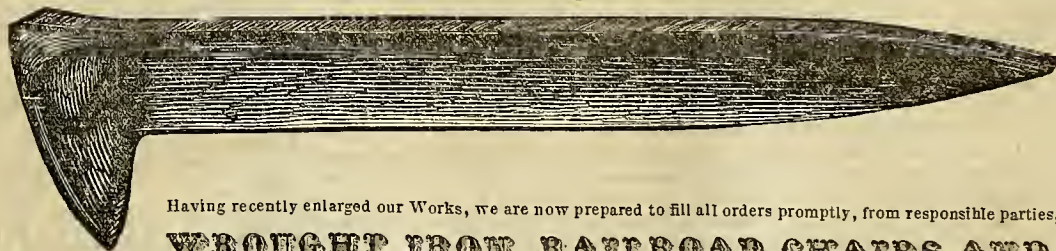
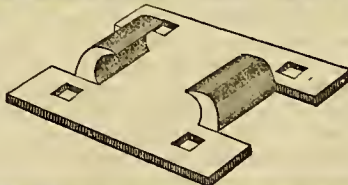
feb5-1y

## CINCINNATI WROUGHT-IRON

# RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs), made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3rd: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

J. B. GREEN & BRO., Proprietors.



Most Direct Route to the East.



## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

**ONLY ROUTE**

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

**THREE DAILY TRAINS.**

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By this Express Train of this route, the time from Cincinnati to Baltimore is but 36½ hours, and to Washington is but 27½ hours.

**Fare as Low as by any other Route.****FOR THROUGH TICKETS.**

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
jul10 Office, Adams Express Co., Third street.**Terre Haute & Richmond R. R.****Indianapolis to Terre Haute,**

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

**MAIL TRAIN.**

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

**EXPRESS TRAIN.**

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,  
apl10 Sup't Terre Haute & Richmond R. R.**PAGE'S****PATENT PORTABLE CIRCULAR SAW MILLS.**

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Settling Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

**TIME FROM CINCINNATI**

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

**FOUR DAILY TRAINS.**

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steuberville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

**FOR THROUGH TICKETS.**

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, south-east corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

**THE OMNIBUS LINE**

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

jul17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

**OHIO AND MISSISSIPPI RAILROAD.**

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**Freight.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.  
Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L  
Office No. 2 Burnet House.

1856.

1857.

Summer Arrangement.

1857.

## Cincinnati, Hamilton & Dayton [TRUNK LINE.]

**RAILROAD,**

FOR THE

**NORTH, EAST, AND WEST.**

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

**COMMENCING MONDAY, Aug. 24. THROUGH TICKETS FOR**

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, PHILADELPHIA, ST. LOUIS, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPOUT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

**SIX DAILY TRAINS**

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPOUT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

**"STEAMER BAY CITY,"**

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS** Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

**Only Night Train out of Cincinnati FOR CHICAGO.**

This train also connects at Hamilton with train for Richmond and all intermediate points.

**ONE TRAIN ON SUNDAY.**

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.**

BAGGAGE CHECKED THROUGH.

**RETURNING TRAINS**

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

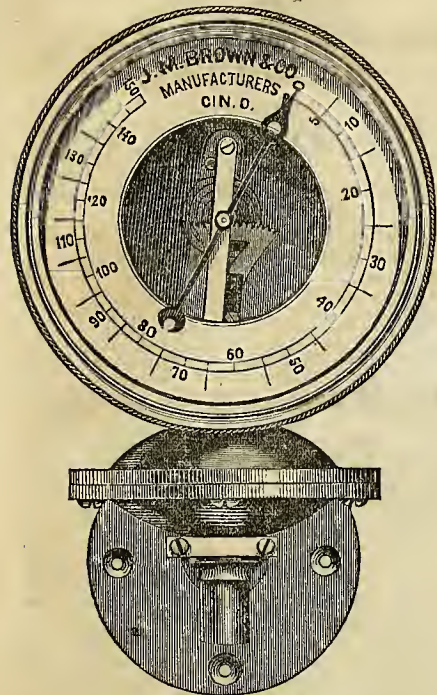
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.  
THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES  
and to Set the tubes in the best manner. Tube Cleaners, Steel Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tuires.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.



N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.  
LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy. 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.  
WROUGHT IRON WELDED TUBES,  
From ¾ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA. Aug

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.]

H. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS. DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS OF

Plain and Figured Mohair Plush  
Printed & Unent do., Entirely New Designs;  
MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars  
ROPE MATTING, Every Width  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

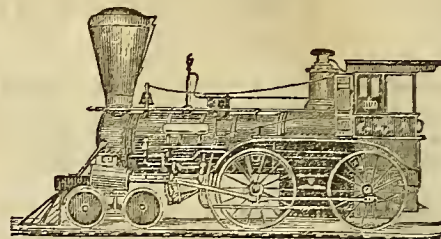
FOR CUSHION & MATTRESS FILLING  
N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.  
RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.  
mar 1-ly

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap. 20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for window seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes.  
Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

## Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Condensers' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,  
Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
1006.

## GEO. D. WINCHELL & BRO., 172 Elm Street, bet. 4th and 5th, CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

## AND Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

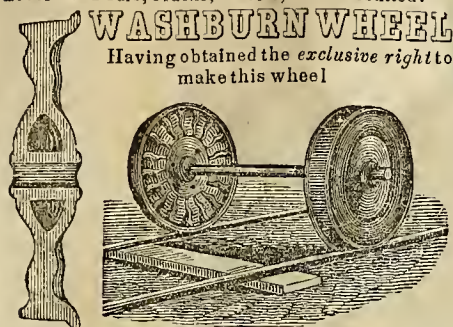
Orders thankfully received and promptly filled at the lowest price.

1st LVER MEAL. (The highest prize) awarded to these pumps at the Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855.



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Cele. brated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

Machinery and Machinists' Tools,  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

LOCOMOTIVE HEAD-LIGHT,  
Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Glohe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures

### Brass Work

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

Steam and Water Gauges,  
Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks.

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

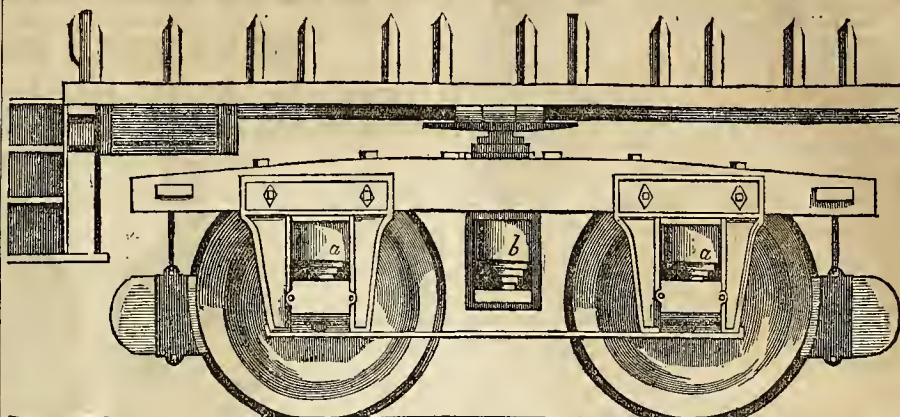
Baggage Barrows and Cheeks, Freight Trucks,  
**CAR FINDINGS,**  
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

IF ORDERS SOLICITED AND PROMPTLY  
FILLED.

cc23-1y

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT... M. D. WELLMAN... C. M. RU

### DAVENPORT, RUSSELL & CO.,

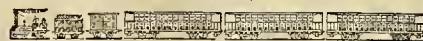
### Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16/57 JOSEPH DAVENPORT.

### MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Janl. Muskingum Works, Zanesville, O.

### S. C. THOMSON & CO

MANUFACTURERS OF

### PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,  
1 n2J NEWARK, N J.

### Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Sup't.  
Racine, May 15, 1857. my21

### Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cin- cinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [Janl-ry] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-tf 10 Wall st., near Broadway, New York.

**SILVER, GOLD, LEAD,**

**And Other Minerals,**

**ON THE PROPERTY OF THE**

**Sonora Exploring and Mining Co.,**

NEAR TUNAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O.

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.  
N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 30 to 35 per cent. made in difference freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,  
KEEP constantly on hand a large and well selected  
assortment of everything in their line which they  
offer on favorable terms.**

**RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.**

**Ruling done to order, of any Pattern.**

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,  
Iron Founders & General Machinists,**

**ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for  
Steam Engines of any Size.**

**PLATE CAR WHEELS and CHILLED TIRES** equal to any produced in the country.

**WHEELS AND AXLES** fitted for use.  
**HYDRAULIC PRESSES** for pressing Oils and for other purposes.

**MACHINERY** of the most approved construction for Flouring and Saw Mills.

**GAS HOLDERS** of any size, and Machinery and Castings of all kinds for Gas Works.

**STEAM BOILERS and WATER TANKS** of any size or description.

**SHAFTING, PULLES and HANGERS.**  
**WROUGHT IRON PIPE and FITTINGS** constantly on hand, and fitted up to order.

ap2

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, St. Louis, Mo.  
ap8 OR SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 255 H Street, Washington, D. C. ap12

**Thorough Bed Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:  
THURSDAY MORNING, SEPTEMBER 17, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion	\$1 00
" " per month	3 00
" " six months	12 00
" " per annum	20 00
One column, single insertion	4 00
" " per month	10 00
" " six months	40 00
" " per annum	60 00
One page, single insertion	10 00
" " per month	25 00
" " six months	110 00
" " per annum	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors.

### CONTENTS.—No. 30.

#### EDITORIAL.

The Commercial Aspects of Cincinnati	477
Annual Fair of Mechanics' Institute, Cincinnati	478
Important Railroad Movement	478
Southwestern R. R., Tenn.	479

#### RAILROADS.

Williamsport & Elmira R. R.	479
Erie & Little Valley R. R.	481
Opelousas R. R.	482
Sabine & Galveston Bay R. R.	483
The Alabama & Florida R. R.	486
Welland Railway	486

#### MISCELLANEOUS.

On the Divers Weights Employed in Coinage Accounts	482
Lands of the Illinois Central R. R.	483
The Fulton & Lyons Ferry Case	487

#### MONEY AND STOCKS.

Table of Stocks and Bonds	484
London Quotations	485
Sales at the New York Stock Board	485
Monetary and Commercial	485

### LORD'S DETECTOR AND VIGNETTE DESCRIBER.

We are indebted to Messrs. T. R. Lord & Co., No. 6 West Third Street, Cincinnati, for a copy of their Detector and Vignette Describer. This work is got up on a plan designed to familiarize the business men with the genuine issues of our banks, as well as the spurious and counterfeit trash that is circulated. The genuine Vignettes are described in detail for each denomination, and then follows the counterfeits. This is a valuable feature, and one which, while it costs the publisher, adds to the safety of the reader.

CINCINNATI AND FT. WAYNE RAILROAD.  
We received the expose of this road, its position and prospects, too late for notice in this number.

The earnings of the Erie Railroad for the month of August, 1857, \$530,033.84; for August, 1856, \$540,268.08; decrease \$10,234.24. Earnings for August, 1855, were \$434,779.67.

VOL. 5.—No. 30.

### THE COMMERCIAL ASPECTS OF CINCINNATI.

The commercial growth and stability of Cincinnati is a remarkable phenomenon in the history of the West. It is true that from 1819 to 1822 there was a commercial revolution in Cincinnati, then an infant town, as there was in the whole United States. It is true that from 1837 to 1841 Cincinnati experienced a portion of the evils which were occasioned by the reaction of that great speculative era; but there was nothing then of disaster as compared with those of New Orleans, New York, Philadelphia or Boston. The waves which broke there with so much force were only faintly felt in the Ohio valley.

In 1854 several private banks in Cincinnati failed; but, commercially speaking, there were no failures, nor are there now, strictly growing out of commerce. For several years Cincinnati has been so utterly bereft of bank capital that her business men have been obliged to husband their resources, and depend on their own means. In one aspect this has been very beneficial. While it has limited the aggregate of commercial transactions, it has placed them on much firmer ground. More business has been done for ready money, and credit has been more strongly established. In the financial aspect, therefore, Cincinnati has within a few years acquired strength and credit to a degree which is relatively unequalled by any city in America. But it is not in this aspect merely we would consider this subject. It is of the COMMERCE of Cincinnati we would now speak. The actual relative commerce of Cincinnati has increased with the last six years at a rate which is certainly surprising, even to those who have looked upon its prospects with the most sanguine expectations. We have before us the Annual Report of William Smith, Superintendent of the Merchants' Exchange, and its statistics contain some things worthy of note. We give below a comparative table for 1850-'51 and for 1856-'57, with the rate of increase on some of the leading articles:

IMPORTS.		Increase per cent.	
1851-2.	1856-7.		
Corn, bush.....	489,195	1,673,362	233
Cotton, bales.....	7,168	18,784	150
Coffee, sks.....	91,177	102,405	11
Hay, bales.....	12,691	57,722	360
Iron, pieces.....	225,039	843,499	265
Do., bbls.....	60,839	128,580	90
Do., tons.....	2,570	6,181	160
Oats, bush.....	164,238	534,312	225
Merchandise, pkgs	175,938	810,091	360
do tons.....	3,370	2,012	70 dec
Molasses, bbls....	61,490	43,632	30 "
Sugar, hhd's.....	29,808	15,980	90 "
do bbls.....	18,584	21,647	16
do bxs.....	3,612	1,473	60 dec
Tobacco, hhd's....	3,701	4,837	30
do bales.....	1,697	2,663	60
do kegs.....	19,945	40,994	100
Wheat, bush.....	388,680	737,723	100
Whisky, bbls.....	244,049	531,873	118

The above table shows an immense and rapid increase of the trade of Cincinnati.—Taking the aggregate values, and the commerce of Cincinnati has increased in six years 150 per cent!

The value of Imports and Exports to and

from Cincinnati, during six years past, was as follows:

Years.	Value Imports.	Value Exports.	Aggregate.
1851-2.....	\$41,256,199	\$33,234,896	\$ 74,491,095
1852-3.....	51,230,644	36,268,108	87,498,752
1853-4.....	65,730,029	45,432,780	111,162,809
1854-5.....	67,501,341	38,777,394	106,278,735
1855-6.....	75,295,901	50,744,786	126,040,687
1856-7.....	77,090,146	55,642,171	132,732,317

It must be borne in mind that these figures do not show the entire value of our commerce. None of the furniture, machinery, agricultural implements, such as wagons, portable mills, reaping machines, etc., etc., exported are included in our exports, and a large amount of general merchandise is not included in our imports. Ten per cent. may be added to the aggregate value of our imports and twenty-five per cent. to the value of the exports as given, in order to arrive at the true figures.

In the above table will be noticed the rapid growth of the iron trade. This arises from the proximity of the valuable iron mines of Ohio, above the Scioto, which are among the most profitable resources of Cincinnati.

The Report of the Chamber of Commerce says:

"The progress of the manufacture of iron in all its departments, notwithstanding though rapid it has been for some years past, still continues unabated; and the productions of this department of our industry have found their way into new markets during the year. The scarcity of coal, alluded to under that head, was a serious injury to this as well as all other departments of manufacturing, as business had to be suspended to an alarming extent during two of the winter months, thus diminishing the quantity of work which could otherwise have been done; but after navigation opened, orders having accumulated, all our shops were taxed to their utmost capacity, and a larger quantity of work was turned out during the spring months and all through summer, than ever was in the same time before.

"The iron trade is in a very healthy state. The demand has been fully equal to the supply, and at no time have stocks accumulated. By an arrangement made between the railways of Indiana and Illinois, iron in all its various forms is being transported hence to Illinois, Wisconsin and Iowa most extensively without reshipment, the same cars running through to each point of destination. In this way the business doing with the North-West has increased fifty per cent. A few days ago an immense iron bridge for some railway in Northern Illinois was taken from the establishment of one of our manufacturers to its destination by railway."

As observed above, the manufacture of furniture, and many similar articles, are not included in the table of exports, &c. The Report says:

"This branch of business suffered severely by the scarcity of fuel last winter, and the long suspension of navigation; but during the spring and summer orders have come in very rapidly, and all our establishments have been fully employed. A new system has been adopted for the transportation of this article, by which furniture can be carried by railway with great facility. The pieces are so arranged that they are taken apart so as to pack



close, and thus a large quantity can be stowed in a railway car, and after it arrives at its destination it is put together, and is then in as good order as when it left the warehouse. Large quantities of furniture are now being transported daily by railway to various points in the North-West, including St. Louis, various places on the Upper Mississippi, Chicago and Milwaukee. The railway companies charge a certain price for the use of the cars, and the manufacturer then exercises all his tact to pack as much in each car as possible. This mode of conveyance is found to be the most desirable in every respect, and is preferable to carriage by river. This business continues to increase rapidly, and, as regards its importance to the progress of our city, stands in the very first line in the various grades of our industry.

"Last year the whole number of establishments engaged in this business was sixty-seven; during the present year it has increased to seventy-five—being an increase of eight establishments in the year. The value of the goods turned out the past year nearly reaches four millions dollars!"

Much of the commerce of Cincinnati depends on its manufactures; and the various branches of manufactures have increased continually. We have given above examples in the manufacture of iron and furniture; but it extends to all branches of business. The manufactures of candles and soap have greatly extended; that of clothing still more. The preparation of the hog, in the various forms of lard, lard oil, bacon, hams and mess pork, has continually increased. The export of lard oil now reaches about 50,000 barrels per annum, which amounts to \$1,200,000.

The failure of the cane crops from which West India rum is made, and the failure of the French grapes, from which French brandy is made, has occasioned in the last year an immense demand for American alcohol, from which to manufacture these articles. Hence alcohol and whisky were exported in large quantities to France and other places for adulteration. This caused the concentration and increase of the whisky trade in Cincinnati, where it is rectified to suit the objects of purchasers. The history of this business is curious, and we extract from the Report to the Chamber of Commerce the following account of it:

"The large increase in the demand for this article the last two or three years, growing out of the failure of the sugar crop, and the consequent high price of rum, and the failure of the grape crop in Europe, leading to a rapid and large advance in the prices of French brandy, stimulated its manufacture in an unusual, and, indeed we may say, unthought of degree. New distilleries were built all over the West in 1856, and the capacities of old ones enlarged—the large profits made that year in the business, and extraordinary rapidity with which the wealth of distillers accumulated, creating a general desire on the part of all enterprising and progressive operators to go into the business; and about the time the corn crop of 1856 was ready for use it was estimated about two hundred and fifty new distilleries were finished and ready to enter the lists with the old ones to convert

the great staple of the country into whisky for domestic and foreign use. Soon after the commencement of the present year a change took place in the general aspect of matters—the foreign demand nearly ceased, the manufacturers of French brandy in France became overstocked with American whisky in the shape of alcohol, and the price of the article went down at Bordeaux and Marseilles to a ruinous point for the American shipper; the home demand was more than satisfied, and stocks accumulated in all the home markets. The quantity of this article distilled in this city and vicinity during the past and previous year and sold in this market compares as follows:

1856-7.....	531,873 bbls.
1855-6.....	428,001 "

Increase.....103,872 "

The above comparison in gallons stands as follows:

1856-7.....	23,934,285
1855-6.....	19,260,045

Increase in gallons.....4,674,240

"In the distillation of this there were consumed 7,978,095 bushels of corn and other grain. This city, in addition to being the great pork market of the country, and the great manufacturing emporium of the western portion of the republic, is, also, beyond all doubt the most extensive whisky market in the world."

Eight millions of bushels of corn distilled into whisky to supply a single market must certainly be regarded as one of the extraordinary features of the times!

The exposition we have given above will lead every reader at once to the conclusion that the commerce of Cincinnati is increasing most rapidly.

#### ANNUAL FAIR OF MECHANICS' INSTITUTE, CINCINNATI.

The Fifteenth Annual Fair of the Mechanics' Institute of this city opened on the evening of the 10th September. The Committee of the Institute having in charge the erection of the buildings conceived the design of erecting an iron structure, cheap and airy, and yet sufficiently substantial for any purpose. The frame, girders, columns, and supports of every kind, are constructed of gas pipe, put together with the aid of fittings manufactured for the purpose at the Eagle Iron Works of this city. The buildings are in the form of a T. The main building is 130 feet long by 60 feet wide, and the cross building is 100 feet long by 60 feet wide. The whole is equal to a building 230 feet long by 60 feet wide. It is roofed with Outcalt's Metallic Roofing, put on by Matthews, Caldwell & Co., of this city. The sides are enclosed with wood. The whole building is a beautiful, light and airy structure, and does credit to the mechanical skill and ingenuity of its designers. The principal defect about it is the lowness of the story. From the floor to the eaves is but thirteen and a half feet, while a building of that size should be at least twenty feet high. This defect is partially obviated by the open work of the roof, which gives a fair height in the

center and serves for the purpose of ventilation.

The plan so ingeniously adopted here to secure a building quickly erected and quickly removed, affords valuable suggestions for the construction of railroad depots and other buildings, where it is desirable to secure a large span and great strength of roofing. The form of the gas pipe, an iron tube, is one which gives the greatest strength with the least material. It is quickly and easily put together, and when erected into a trussed roof makes a structure of great strength.

Outcalt's Metallic Roofing, which is used in covering this building, is another good suggestion. It comes in large sheets and is quickly put up, and when up is a perfect protection against weather. Its form admits of the natural contraction and expansion of the metal, and thus provides for the greatest difficulty thus far experienced in metallic roofing.

The exhibition is one which will do credit to our city. The immense building is thoroughly filled—so much so that some of the more bulky articles are necessarily placed outside the building. Among the mechanical articles on exhibition we noticed Lane & Bodley's Power Mortiser, a most valuable machine for car-builders; McGowan's Pump, exhibited by George D. Winchell & Bro.; Aubin's Gas Works, suitable for railroad depots, villages, etc., exhibited by Wrightson & Co.; Musgrave's Gas Cooking Apparatus; a number of Gas and Steam Heaters; Morris & Fontayne's Padlock for railroads and Burglar-Proof Lock for banks; Brown's Steam and Water Gauges, for locomotives and stationary engines; Latta's Steam Fire Engine; Corn Mills, Washing Machines, Fountains, Wire Fence, India Rubber and Gutta Percha Goods, Steam and Gas Fittings, and indeed almost everything useful in the arts or domestic life.

Some of the most prominent articles of use to railroads we shall hereafter notice more in detail.

#### IMPORTANT RAILROAD MOVEMENT.

Under the above head we find the following article in one of the leading Eastern Journals:

"We mentioned yesterday that the executive officers of the Baltimore and Ohio, the New York Central, the New York and Erie, and the Pennsylvania Central Railroad Companies were in Convention at New York, having under consideration various matters of importance to the railroad interests which these leading lines represent. The Convention closed its labors on Monday evening, and, we hear it stated, has adopted several measures of radical reform having an important relation to the general railroad economy of the country. These measures, it is reported, embrace a reduction in the speed of the fast trains over their respective roads, a uniform and increased freight tariff, the abolition of the free pass system, the discontinuance of all runners or freight solicitors, except at



certain points, and a cessation of the practice of printing innumerable small bills, which have been multiplied in such an extraordinary degree as to entail large expenses upon the Companies. Instead of seeking business through the agency of runners and the scattering of hand-bills, the Convention favored a more extensive system of advertising, through the newspapers as the legitimate mode of presenting their facilities to the public. These are the main points of the agreement, which, after being signed by the Presidents of the different Companies, and approved by their Boards of Management, will be put in force. It is thought that the example set by the four great lines of East and West communication will be followed by the principal Railroad Companies throughout the country."

The measures here proposed to be adopted are steps towards a reform much needed in railroad management. It is true that trains, taken as a whole, run too fast—that the actually paid freight tariff is too low—that the giving of free passes is abused. All these things are true, and have been frequently pointed out as radical errors, both in our own columns and in the newspapers of the country. But it is equally true that the reforms cannot be carried out in the wholesale manner in which it is now proposed to carry them out.

Take, for example, the speed of trains. The express trains of our railroads make an average of twenty-five miles per hour. Business men who have one and two thousand miles to travel, and whose time is valuable, will illy brook a reduction from that speed. They rather expect to increase it than reduce it; and they would much rather pay double fare and gain a day than take a slow road. What is needed in regard to speeds, is to diminish the weight of express trains so as to increase the speed of the fast trains to *thirty miles per hour, and to charge in proportion*. The error is not in running too fast, but in carrying a passenger at the same price at whatever rate of speed he chooses to ride. The system of different fares for different speeds has been successfully carried out in Europe, and is the only rational and just one; and if the four lines here mentioned will adopt it, there is not the slightest doubt but that it will become the universal custom of our country also.

So also with freights. Express freights should be charged in proportion to the speed at which they are carried. The freight tariffs on most of the roads are high enough, if strictly adhered to. The difficulty consists in the deviation from the tariff by placing particular articles in a lower class than that in which they really belong. The remedy is not so much an increased tariff, which will array the forwarding interests against the railroads, as a rigid adherence to established tariffs and classifications.

So with passes. There is no doubt but that the system is abused. When the boot-

blacks of our hotels are supplied with passes as often as they desire them, there can be no question but that the system is seriously abused; but the remedy should be not so much the cutting off the whole system as the reforming it, and the manly exercise of the right to deny a free pass where it is not plainly due.

But, above and beyond all these abuses, the railroads of our country will find, if they will institute a rigid self-examination, a system of wasteful and lavish expenditure in their office business—a paying of high salaries—high rates of interest, and extravagances which eat up thousands where the abuses mentioned above consume only hundreds. Here is where the reform should begin. Let the large matters be attended to first and the smaller ones will be readily amended.

#### SOUTHWESTERN RAILROAD, TENN.

This important road is progressing finely. We are advised that sixty miles are under contract to responsible parties, and that the contractors are progressing rapidly on the first section of thirty miles from McMinnville.

A letter from the Engineer says:

"At a meeting of the Stockholders of the Southwestern Railroad, at Cookeville, Putnam Co., Tenn., the following Directors for the following year were elected:

"Th. Mayboy, S. B. Spurlock, H. Harrison, W. Botson, G. Simpon, R. L. Gardenhire, W. Jared, S. B. Eastland, M. C. Dibrell, E. G. Thompson, A. Dibrell, J. McKinney, H. Denton, J. D. Goodpasture, W. J. Howard.

"OFFICERS.—Th. Mayboy, President, J. Snodgrass, Secretary and Treasurer.

"A very harmonious and enthusiastic feeling prevailed; the different counties pledged themselves to see the Road built through their respective counties, and there is no doubt that the funds on hand in the fall will allow a large increase of the force now at work upon the first fifteen miles. The Lexington and Danville Railroad may expect to meet us at the State Line, in three or four years, when the whole line from Cincinnati to Mobile and Pensacola will be entirely completed. The people along the line are doing their best, and we hope to receive some substantial aid from Cincinnati after awhile."

DETROIT AND MILWAUKIE R. R.—The Board of Control of the State of Michigan, have granted 53,000 acres of the public lands donated by Michigan for the railroad purposes, to this road. This grant secures a subscription of stock in England sufficient to complete the road.

## Railroads.

#### WILLIAMSPORT & ELMIRA R. R.

The President and Managers, in laying their annual statement before the stockholders, take leave to congratulate them on the results of the past year's business, as well as on the general condition of the affairs of the company.

The profits of the transportation department for the twelve months ending 31st of 3d month (March), 1857, amounted to \$157,458 68, and these, with the profits of the machine shops, on repairs done for other companies, and the profits realized on the various securities held by the company over their estimated value at the close of the last fiscal year show a surplus, after discharging the interest on the funded and floating debt of the company, and the expenses of the offices and salaries in Philadelphia, of \$26,907 23, which may be placed to the credit of a dividend fund, subject to the future action of the stockholders.

While, however, this cannot but be deemed a favorable result, considering the recent organization of the company's business and credit, yet the year that has just expired has proved to its officers a period of great labor and anxiety. The general stringency of the money market seriously interfered with arrangements in progress at the date of last report, for funding the floating debt of the company, and rendered extremely difficult any new negotiations for that purpose. When it is recollected that this floating debt was largely increased during the year by the purchase of five new engines and several hundred cars, as well as by a number of permanent structures, necessary to the increased business of the road, it need hardly be said how greatly this cause has added to the direct cares and duties of the officers.

The indirect influence of this monetary pressure was even more seriously felt in the business of the company. Early in the summer the Northern roads from Elmira to the suspension bridge at Niagara, which formed at that time the principal organized connection this road possessed with the Northwest, became so embarrassed as to be unable to meet their engagements, and have since passed into the hands of a receiver for the benefit of their creditors.

The Philadelphia & Sunbury Road has been equally unfortunate, and compelled to part with its entire rolling stock and machinery to discharge its liabilities. A vigorous effort alone on the part of the friends of the Williamsport Company saved the Catawissa Road from a similar fate, and placed it on a permanent basis.

Finally, the disastrous strike on the New York & Erie Railroad, and the consequent derangement of its fall and winter business, materially interfered with the development of our trade in that important direction.

Even had these unexpected difficulties not arisen, the labor attendant on the mere organization of our trade was no light one. At the commencement of the past fiscal year the entire facilities in this city for transacting the vast business of the Northwest and the Lakes were comprised within the space of a few square feet in the corner of the Reading Railroad freight depot. All the grain, barley and produce received, and all the goods forwarded, were obliged to be handled within these contracted limits; and the drays of the shippers were forced to take their place in a long line,



which the local business of that road always created during the seasons of active trade. Our position in every way was purely secondary to their own proper business; and the result was an almost complete embargo on the development of the Northwest trade.

By vigorous exertions on our part, and the exercise of an enlightened liberality on the part of the Managers of the Reading Railroad Company, this difficulty has been entirely overcome. A commodious warehouse for the exclusive use of the through trade, has been secured at the southwest corner of Broad and Vine streets, and the enterprising firm of Allen, Hugel & Co. have been constituted the special agents of the line from Philadelphia to Elmira.

In addition to these important arrangements, the Reading Company have consented to join the Williamsport and Catawissa Companies in the rental, for a term of years, of a large number of house and flat cars for the through trade, thus placing under unique and systematic management a sufficient amount of rolling stock for the present business of the road.

It is hoped and believed that the same enlightened policy will be continued and extended with the growing demands of the trade; it being the only apparent mode by which the various connecting lines can be, for all practical purposes, consolidated into one harmonious working system.

The local business of our road has also been a subject of unceasing care to the managers and officers of the company.

The bituminous coal at Ralston is becoming of great and increasing importance to our trade, and has supplanted in many districts in Western New York, the product of the Blossburg mines. It is believed to be freer from sulphur and other impurities, and better adapted to many purposes in the arts.

Several new coal operations have been effectively commenced at Ralston the past year, and an iron furnace started in the neighborhood. There are in that vicinity two or three other furnaces ready to blow in, should the experiment be found to succeed, as it seems likely to do.

By the appended report of our excellent Superintendent, whose systematic and economical management, and untiring devotion to the interests of the company, have in a great measure contributed to its present prosperous condition, it will be seen that some further facilities are needed at Ralston for the proper development of its trade. These have been duly authorized by the Managers, and are already in progress towards an early completion.

Among the important objects in view by the present officers, in so largely increasing the rolling stock and machinery of the road, was to afford adequate facilities to the large iron establishments of Pennsylvania to place their vast products, by a direct line of transportation, at the great points of consumption—the Lakes and the West. It seemed unreasonable that such large amounts of pig iron and railroad iron should be forwarded by the circuitous routes of Philadelphia, New York and Albany to Buffalo, when our road furnished, with its connections, a rapid and convenient mode of transit.

The result has corresponded with our calculations in this respect, and many thousands of tons of iron from the furnaces of Shamokin, Danville, Bloomsburg, and other places, and of iron rails and bars from Phoenixville

and Danville rolling mills, have passed northward over our road in the year that has just expired. This business, however, is only in its infancy. For the ensuing year contracts have been made from remote points on the Pennsylvania chain of canals to forward to Williamsport large amounts of iron to be received by our company at their basin at that place, and shipped to Elmira by railroad.

Forming, as our road does, the only connecting link between all the railroads and canals of Pennsylvania and those of New York, and piercing the very heart of the iron districts of this State, it is a moderate calculation to estimate that, at no distant day, a million of tons of iron will annually pass by this route to the northern and western markets.

The great advantage which railroad transportation possesses over canal navigation for such vast establishments as the Montour rolling mill, for instance, consists in the regularity and uniformity of the shipments. If a contract is made for the delivery by a railroad company of 5,000 or 10,000 tons of iron within a limited time, a certain number of cars per day are detailed for the service, and both the shipper and receiver are certain of their calculations being sustained.

So, during the long winter season, while hitherto these large manufacturing concerns have been hermetically sealed up from their markets and their supplies, and forced either to carry enormous stocks over till the opening of canal navigation, or else to suspend operations entirely, either of which are very costly both to the producer and the consumer, they are now able to carry on their business with the same uniformity and dispatch as in the summer months.

More especially will the importance of this winter transit be felt in the shipment of railroad iron to the far West. If the manufacturer, while the Lakes are closed, can accumulate his product at Buffalo or Dunkirk, so as to freight a vessel for Chicago on the opening of navigation, he is able to meet the active and ready market which the wear and tear of the winter, and the inconceivably rapid extension of Western railroads, always create in the spring—while, if his stock is at Danville, he loses months of the season in shipping it away.

But perhaps even more importance to our road than any of these sources of revenue, is the development of the anthracite coal trade of our State, by this route to the illimitable markets of Western New York, the Canadas, the Lakes, and the far West; and to this object the unceasing and earnest attention of the officers of the company has been turned.

Finding, in the first place, that the facilities at Elmira were altogether inadequate for the present trade, and that the large basin and wharves at that place were owned by private individuals, who could control, by that means, the business of the company, a great effort was made to procure, at a reasonable cost, the whole of this property, and sufficient adjoining land to make us independent for the future, whatever might be the demands of the trade. The owners of this estate, being friendly to the company, relinquished their rights at a moderate price, and some fifty acres were purchased at Elmira, covering the connecting tracks of the New York & Erie Railroad, the basin property, and 1500 feet of canal wharfage. The company has since been offered a very large sum for the purchase, but, in the judgment of the Managers, no considerable portion of it can be spared; and so soon as

the coal, iron and lumber trades are completely organized, a small charge for wharfage will cover the annual rental of the property.

During the past year 625 coal cars have been purchased, all of the best quality of material and workmanship, which, with 100 previously contracted for, give now an efficient working force of 725 cars, besides 23 ten ton cars for the Ralston bituminous coal trade.

It is estimated that these 725 cars, with those owned by the Susbury & Erie Company, will fully supply the coal trade to the extent of our present facilities for shipping at Elmira.

Great dissatisfaction, however, is felt by the Shamokin operators at our not being able to furnish a larger supply of cars; their arrangements being already matured for a business this year of 600,000 tons of coal, if the demand and the facilities for transportation existed to remove it.

The Officers and Managers of this company fully appreciate the inexhaustible wealth of the Shamokin district, and the unsurpassed variety and quality of the coal produced there—covering, as it does, all grades of red ash and white, from the softest to the hardest anthracite; and are also aware that the trade of this region will constitute one of the principal sources of future revenue to our road. But it is impossible to centralize a trade so vast and important as this in a single day, or a single year. Cars have to be placed on the Northern and Western roads; boats must be secured on the canals; and responsible dealers, at the various points of shipment and consumption, must be attracted and secured to the trade. The supply and the demand are alike immediate and unlimited; but the intermediate organizations of trade require time and patience and labor to establish. It is believed by the Managers, and by our excellent agents at Elmira, J. Langdon & Co., that from 150,000 to 200,000 tons will be as large an amount as can be moved from that point in the present fiscal year. The arrangements of our company are adequate to the transportation of the latter amount, if it be found possible to tranship it at our northern terminus.

The lumber trade from Elmira southward will prove a very important one to our road. The fine lumber used in this city for carpenter work comes mainly from Allegheny county, New York, Michigan and the Canadas. Over 100,000,000 feet last year were received in Philadelphia from Albany, Newburg and New York, by outside shipment and by canal. The same arguments which have turned the attention of the iron shippers so successfully to a more direct and regular mode of transit, have been equally pressed upon the lumber dealers, and some large amounts have been shipped the past month, and much larger contracts been made for the ensuing year.

The same platform cars that carry the iron northward are now returning loaded with lumber from Elmira, for Philadelphia consumption.

The Managers have also purchased at Williamsport the basin and the adjoining property, which connects the railroad with the West Branch Canal, and which, like that at Elmira, were owned by private individuals.

This gives them the control of the business of their road at this point—a right which is not only essential to its general trade, but also especially important in consequence of the provisions of an Act of Assembly which bestows on our company a drawback of all the tolls on freight brought by the road for a dis-



tance of sixty miles for a term of fifteen years.

Our first draft on the State Treasurer, for \$2,400, this year, was duly honored, and the money applied towards the purchase of this basin, on account of a sinking fund for the first mortgage bonds, as pledged by the company in the deed of trust under the mortgage.

The loan authorized by the last meeting of stockholders of \$350,000 at 10 per cent., has not yet been entirely filled up, about \$290,000 having been subscribed and paid at par on this account. While placing the mortgages on the road and on the personal property, as authorized by a special Act of Assembly, to cover this subscription, the Managers concluded to fix the amount of the loan at \$500,000—as this sum will be ultimately required, when the bills payable given for the purchase of rolling stock and machinery, and for the structures of the road, shall mature.

To the desirableness of funding the remainder of this loan, the Managers would call the especial attention of the stock and bondholders of the company. Secured, as it now is, by a double mortgage, first on the personal property of the company, under a special Act of Assembly for that purpose, and secondly, by a collateral mortgage of like amount on the real estate and franchises of the road, this road undoubtedly constitutes one of the safest and most desirable investments in the market. The rate of interest, 10 per cent., was fixed upon in order to place the bonds at par, which has invariably been realized to the company in all the negotiations they have made.

The Managers have the gratification to announce that, in response to an urgent personal appeal, the citizens of Williamsport recently subscribed for \$25,000 of these bonds, and have already paid up a large portion of their subscription.

The citizens of Elmira, in a like spirit of friendly interest towards the company, raised by voluntary donations and remitted to the Treasurer a sum sufficient to liquidate the discount on an equal amount of this loan, which was immediately appropriated to that purpose.

A number of smaller subscriptions have been made, and a very slight effort of the friends of the company, among the parties seeking a safe and remunerating investment, would result in the completion of this fund, and the almost entire extinction of the floating debt of the company.

The officers of the company have noticed with great satisfaction the rapid absorption of its general securities, which has taken place in the market the past year. It is estimated that over one million of dollars have been invested in its stocks and bonds within that time. The principal part of this demand has been from strong parties seeking permanent investments; and our record of the payments of the coupons shows that many staunch friends of the company are accumulating large amounts of the first and second mortgage bonds.

Yet with all this absorption, owing to the prostrate condition of the parties formerly engaged in the construction of the road, these bonds are still by far the lowest first class securities in the market. Being seven per cent. bonds, with a first mortgage of but \$1,000,000, and the second of \$700,000, on a road 73 miles long, there is no reason why they should not rank as high as any similar railroad loans in New York and Pennsylvania. For all practical considerations the accords may be considered equally desirable with the firsts, the interest being earned and promptly paid,

and both loans together hardly reaching in amount an ordinary first mortgage on such property.

This subject is alluded to at this time for the sake of the general credit of the company, which would be still further promoted by the entire absorption of these bonds from the market. It is no unimportant consideration in the economical conduct of so large a business as that of our company, that it should rank with the most favored corporations in the general value of its securities; and no more favorable opportunity, it is believed, will ever occur hereafter for profitable and permanent investment in these loans.

In conclusion, the Managers would invite attention to the copious tables accompanying our Superintendent's Report\*—every detail of the operation of the road will there be found, together with a statement of the new track and buildings constructed. The expenditure has been very small on these accounts, although nearly three miles of additional track have been laid, owing to the iron having been purchased within the last fiscal year, and therefore included in the old construction account.

The operating expenses of the road have averaged but 42½ per cent. on the receipts during the year. This has been partly owing to the excellence of the machinery on the road, which is all new and in first rate condition; but we are also greatly indebted for this result to the thorough system and economy introduced and maintained in every department by the vigilance of Mr. Redfield, our Superintendent.

#### ABSTRACT OF THE ANNUAL ACCOUNTS, 1856-'57.

##### TRANSPORTATION ACCOUNT.

##### Cr.

By Passenger receipts.....	\$ 75,023 96
Freight receipts.....	183,251 73
Sundry receipts—mail, express, wheelage accounts, and operating connecting roads.....	16,278 52

Total receipts.....\$274,554 21

##### Dr.

To repairs of track.....	\$20,262 94
Repairs passenger engines and tenders.....	6,630 88
Repairs freight do.....	6,634 94
Repairs passenger cars.....	5,864 29
Repairs freight and coal cars.....	7,426 99
Oil and waste for passenger engines.....	1,376 29
Do. freight do.....	2,351 97
Do. passenger cars.....	895 84
Do. freight and coal cars.....	2,359 60
Passenger conductors, baggage and brakemen.....	4,518 62
Freight do.....	6,406 03
Passenger engineers and firemen.....	3,806 26
Freight do.....	8,995 71
Porters, watchmen and switchmen.....	4,546 98
Agents and clerks.....	5,360 40
Incidental expenses and salaries, shop.....	3,941 94
Labor, loading and unloading.....	1,870 35
Loss and damage to persons and goods.....	634 22
Fuel used this year.....	12,500 09
Wood and water station attendance.....	352 40
General superintendence.....	3,399 96
Office expenses and stationery.....	1,329 92
Telegraph expenses.....	2,134 04
Earnings refunded.....	481 87
Incidental expenses.....	446 44
Moving coal at Elmira.....	605 50
Taxes.....	883 50
Contingencies, lawyers' fees, &c.....	639 00
	117,095 53

Balance to Cr., Profit and Loss.....\$157,458 68

##### PROFIT AND LOSS ACCOUNT.

##### Cr.

3d month, 31, 1857.....	
By balance of transportation account.....	\$157,458 68
By profit realized on Sunbury securities, at.....	

\*The statement of the Superintendent, and the tables referred to, will appear in the pamphlet edition of this report.

this advance over their value estimated 3d month, 31, 1856.....	12,212 75
By repair shop at Williamsport, for profit on repairs done for other roads.....	2,683 96
By interest account for balance of this account—see charge coupons, 10 per cent. bonds, below.....	5,266 39
Sundries.....	5,350 00
	\$182,981 78

##### Dr.

To coupons, \$1,000,000 1st mortgage 7 per cent. bonds.....	\$70,000 00
To coupons, \$700,000 2d mortgage 7 per cent. bonds.....	49,000 00
To coupons, balance 10 per cent. bonds, subscribed and held by the company.....	28,500 00
To expense account, for office expenses and officers' salaries in Philadelphia.....	8,574 55
	156,074 55
By balance to dividend fund, 1857 and 1858.....	\$26,907 23
On behalf of the Managers, THOS. KIMBER, Jr., President.	

#### ERIE & LITTLE VALLEY R. R.

The Directors of this company have recently completed a bargain for its construction by which they agree to pay at least one-fourth more for it than it ought to cost. We have often before raised our voice against this crying down of railroad securities by the companies themselves. We give below the remarks of the Buffalo Commercial Advertiser on this question:

**HOW TO BUILD A RAILROAD.**—For a long time a charter has existed for the Erie & N. Y. City R. R., a road running from Erie, Pa., through Jamestown, Chautauque county, to Little Valley, Cattaraugus county, where it intersects the N. Y. & Erie Road. It is one of those foredoomed enterprises which will catch travel about as a ladder will catch soup thrown through its rounds. Thirty-eight miles are within the limits of this State—ten more beyond the Pennsylvania line bring it into junction with the Meadville Road. For this latter ten miles no charter has yet been obtained, but they hope to get one.

Contractors have been found for building the 38 miles for which a charter exists, and in our further account we will quote from the Chautauque Democrat:

"The contractors, as we learn from authority, are Elsey & Thornton, Governors of the Bank of England; Sir John Goddard and Barsey, of England. The American contractors are A. C. Morton, of New York city, and Henry Doolittle, of Ohio. The representative and agent of said company is Mr. R. T. Bailey, of New York. The contractors take this main line of 38 miles at \$33,000 per mile, amounting to \$1,254,000. There is to be two miles of switches in that distance, which they build for \$16,500 per mile, making \$33,000; whole sum for the 38 miles of road and 2 miles of switches is \$1,287,000. The contractors receive all the work done by the company on this 38 miles, estimated at \$240,000, in payment, leaving a balance for the company to pay of \$1,047,000.

"This is to be paid as follows: \$736,000 in first mortgage bonds at 75 cents on the dollar; \$350,000 in stock at par; the balance in second mortgage bonds at 65 cents on the dollar. The contractors to have the use of the road until November 1, 1861, and pay interest on the above bonds till that time. The contractors also pay all taxes on the road and the Indian annuity (\$400 per year) to the same time.

The company are to pay for the balance of the right of way, and for engineering for



eight months from the commencement of the work. The above rates include everything—iron, station houses, rolling stock, &c. The work is to be commenced this fall, at Little Valley, and pushed forward to as early a completion as possible."

Now this, as a fair sample of many another railroad bargain, may serve to contrast the real with the nominal cost of railroads.

This company agrees to pay \$1,047,000 for the completion of their road. They do it by a process of usury; selling their own paper at a depreciated value. On \$736,000 of first mortgage bonds they lose \$184,000, and by deducting the remainder we find the "balance in second mortgage bonds" to be just \$145,000, on which they suffer a discount of \$50,750; thus making their "little discount" figure up the pretty sum of \$234,000. It might be more if we did not charitably estimate the \$350,000 stock at par.

What the contractors expect to get for the work they do, then, amounts in real value to only \$996,000; but the company really pays them \$1,231,000. The actual cost per mile to the company, adding the \$240,000 which they claim to have already expended, is \$38,711. Perhaps it will pay a dividend on this sum, but we must be pardoned for expressing a doubt.

Now, taking the most charitable view of the bargain on the side of the contractors—that is, estimating the work as they seem to have done, it is really only 996,000, or \$26,211 per mile. Here, then, is an unnecessary expense, at the start, of over \$12,000 per mile.

It is by bargains like this that our railroads are brought into discredit. A future of bankruptcy is inevitable to this road, and if it cannot be built without a contract which is a premeditated usury, it had better be left alone. Had the company possessed the means of their own to go on, abjuring contractors and making the construction under their own supervision, they could have built the road for almost one-half what it will now cost them. Only a cheap road can ever pay a dividend on that route; but here the most enormous cost is expended as a legacy of loss to future holders of stock or bonds.

#### THE OPELOUSAS R. R.

The Directors of the Opelousas Railroad Company have decided upon using their utmost exertions to push forward their railroad to the Texas line, on the Sabine river. They have sent out their engineers to locate the road, and to make selections of the lands donated by Congress. The work is to be prosecuted at once, from its present terminus to New Iberia, and will be carried on beyond that with all possible dispatch.

For these purposes the company has issued first mortgage bonds to the amount of two millions of dollars, payable in thirteen years, with interest at 8 per cent., on semi-annual coupons of 4 per cent. each.

This mortgage is on the road as finished to Berwick's Bay, with all its franchises, appurtenances and equipments, buildings and rolling stock. This road is eighty miles in length, and a complete road in itself, of immense local value, forming the channel of intercourse between New Orleans and the richest portion of the heart of the State. It cost to the company, as it is offered in mortgage, about \$2,600,000, and is a productive and revenue paying road without a peradventure. The road was not completed to Berwick's Bay at the

last annual report, but the gross earnings on the road, for passengers and freight, amounted to \$206,365, being an increase of \$90,069, or nearly 80 per cent., of which the increase in freights was about 103 per cent., and on passengers about 50 per cent.

This shows the road to be full security for the loan, to be made more solid by the large increase of business incident to its completion, and in full use to Berwick's Bay, and the beneficent results upon the growth and business of that wealthy region.

But the company make additional and very large independent provision for the payment of the bonds, beyond the resources of the road itself. They make a specific pledge of the proceeds of the sales of the donated lands between Opelousas and the Sabine.

The length of this part of the road is 91 miles, and the estimated quantity of land to be selected under the grants of Congress is 355,000 acres, and they are described as among the best lands in Louisiana. Heretofore shut out from market, for the want of roads, they have been unavailable. A railroad—and such a road as this—will raise them at once into demand. The engineer of the road—who has inspected the route and the lands—says without hesitation that the sales of the lands will build the road. They become by the mortgage a special fund for the payment of the bonds for which the whole road is bound as security. We do not know where there is a better investment offered for the positive security of principal and punctual payment of interest.

But the people of this State, and especially of this city, have stronger motives than that of a dividend on stock, for taking up these bonds, and completing this road. It is a direct avenue from New Orleans to the heart of Texas; the channel by which we are to be connected immediately with the whole railroad system of Texas, and to bring the trade of regions almost illimitable in extent and fertility directly to this metropolis. A company has been organized in Texas, under the general railroad law, to build a road from the Buffalo Bayou to the Sabine. The union completed there, we are in direct communication with Galveston; and, by the various Texas railroads, become the depot of an immense trade yet in its infancy, and capable of immense development.

The prospective advantages are very great, and the means simple, safe, and offered to our acceptance. We do not doubt that the company will succeed in raising the means by the ready sale of their bonds, and that their work will, with the energy which now pervades the management, be successfully prosecuted.—*De Bow's Review.*

#### On the Diverse Weights Employed in Coinage Accounts.

A series of interesting papers relating to the complex weights employed in coinage, read before the American Association for the Advancement of Science, at its recent session in Montreal, by Dr. J. H. Gibbon, of the United States Branch Mint, North Carolina, have been condensed into a brief report, for the purpose of elucidating the practices of modern Mints, and to render intelligible "the principles" which rule the values of precious metals, as moneys.

*First.*—The original elements of the old Easterling and Troyes pound weights, each containing twelve ounces, successively used by the early Britons in commerce and at

Mints, have been found based upon irregular and indefinite forms or quantities namely, a certain number of wheat corn grains, never uniform in their weight, were antagonized by a piece of silver called "a penny sterling," constantly differing in purity of metal, alloys, and value.

When advance in science exposed such inefficiency, a yard measure was defined, by ascertaining the length of a pendulum line, vibrating seconds of mean time, in the latitude of London, at the level of the sea, and a new pound, specially named "The Troy," deduced from this measure, by a certain cubical weight of distilled water at a stated temperature.

These standards of measures and of weight were deposited in the custody of the Commons House of Parliament, and became the legal standard for the commerce of the English colonies, and eventually for the coinage of the United States.

In the year 1834, the original measures were injured by fire at the burning of the old Parliament House, when the Chancellor of the Exchequer named a commission to consider the steps to be taken for a restoration of the lost standards of measure and of weight. The commissioners have recently declined to recommend the adoption of the former plan for restoration, but consider it desirable to remove the Troy scale altogether in Great Britain. It is now confessed that the British Parliament has never been able to give unity of measures and weights, even in England, where great confusion at this time prevails in relation both to weights and measures.

*Second.*—Karat-grain weights, employed from ancient times by diamond and pearl merchants, goldsmiths and jewelers, in their craft, were at first admitted into the Mint of the United States, to decide the graduated relations of pure metal in any well melted mass; but proved inconvenient in their structural arithmetic, which was founded upon a natural base, of equivocal percision—a dried bean, called "Cuara," awkwardly divided into fourths and eighths. The karat-grains were dropped for a more exact and delicate method of computation, derived from the metrical system of modern France. The values of the precious metals depend upon the combined products of the weights for quantity and quality. Differing weights complicate unnecessarily the calculations for coinage.

*Third.*—An accredited but defective avoirdupois ounce of silver—the dollar piece of Spain—was early introduced into the Mint of the United States as an arbitrary unit, to proportion the moneys of account, instead of the eccentric arrangement of pounds, shillings, pence and farthings, inherited by the British Colonies from the mother country.

Avoirdupois weights have been traced to the early emigrations of maritime Phœnicians. They seem to have formed a money standard for neighboring nations—the Assyrians, Egyptians and Hebrews—according to the oldest records. These peculiar weights may have been based upon some processes of terrestrial admeasurement, similar to those which characterize the Modern Decimal System of France, for such evidence exists in the relative values which the ounces bear between two precious metals, sixteen ounces of standard silver being held rather regularly, equal to one ounce of standard gold, in ancient and in modern money, by the actions of an extended commerce.

The ounces of the avoirdupois pound being individually lighter than the ounces of the



Troy weight, or Easterling, have gradually gained a preference in trade, among prominent commercial nations.

By recommendation of the Royal Society, an act of Parliament, after deducting eight grains from the avoirdupois pound, declared that weight to be the imperial standard for Great Britain and her dependencies.

By a like process of reduction, the modern ounce of silver, or dollar piece, has been repeatedly contracted in the number of its grains from the primitive weight carried into Spain by the Tyrians, who settled Cadiz 3056 years ago, according to accredited statements.

The Hebrews indicate the same standard as their "current money" of account, the half ounce avoirdupois of silver or the "shekel" weight.

*Fourth.*—Toward the close of the last century, cautious and faithful admeasurements were pursued by the mathematicians of France, aided by other physicists, to define the extent of certain degrees of the earth's surface, from the level of the sea, near Dunkirk in France, to the same level, opposite Barcelona, in Spain.

By such measure of an arc of the meridian, the distance from the equator to the pole of the earth was carefully calculated. Thence was decided the entire circumference of the globe we inhabit.

These geometrical computation were checked by careful experiment upon the length of a pendulum, vibrating seconds, at the 45th degree of latitude, to test the time or the diurnal rotation of the earth upon its own axis, and thus to prove the other estimate and calculations. From a certain graduated portion of the meridional length from the Equator to the Pole, namely, the ten-millionth part, a distinct "meter," or standard linear measure was obtained, from which rule a cubical weight of pure water, near the freezing point or that of greatest density, gave a standard weight, or quantity, for all measures of capacity.

An exact coin, "the franc," was deduced from the same unitary measure, multiplied or divided decimally, for money quantities both in commerce and at mint.

The French scale for decimal calculation was presented to the essay Departments of the Mint of the United States in 1835, where it has received the general appropriation of the officers who employ it, for simplicity, facility and completeness.

The admission of the entire system of the metrology of France into every one of the departments of the mints, will disembarass them at once from the annoyance of perverted troy and avoirdupois weights, and enable them immediately to assimilate the values of the respective coins exactly with those of France and other nations, who have already, or may hereafter adopt that thorough decimal system.

No change need be made in the fineness nor titles of our coin, nor any in our moneys of account, according to the experience of those nations on the Continent of Europe who have accepted this economy in their mints. A slight alteration in weight alone, fractions of a single grain, will establish the new silver coinage almost imperceptibly among us. Indeed, the gradual reductions hitherto made by law in the weight of the silver coins of the United States below the denomination of one dollar, have produced such close approximation to the French moneys, that two half dollars of our present standard, weigh one grain less than a silver five-franc piece of France!

A perfect conformity in the gold coinage can be readily arranged by consultation at the national mints of the two countries, and a slight action of the respective Governments. —*Pa. Inquirer.*

#### SABINE AND GALVESTON BAY R. R.

Ground has been broken on this road, and the work of construction is actually begun. The Houston Telegraph, in noticing the fact, says:

Accordingly, at the time designated, some twenty-five or thirty of our leading citizens repaired to the point where the line strikes the eastern boundary of the city, about two miles from the bayou, and armed with spades and pickaxes, under the direction of the Engineer, formally broke ground on this great enterprise. First in the work was the Treasurer of the Company, Dr. I. S. Roberts, and after him followed all who were present. Each man took hold with a will and a spirit that afforded a good indication of his interest in this enterprise.

The party having satisfied themselves with breaking the ground, repaired to a neighboring grove, where refreshments were provided, of which all partook with infinite gusto. Wine flowed freely, but not more so than sentiment. Speeches and toasts occupied the hour. The difficulties and hardships of early times, the slow traveling and slower transportation were recalled, as well as the more recent labors which some present had performed on other lines of road, which are now in successful operation. All looked upon the day as an era in the history of Texas. The veil of the future was lifted, and a picture full of hope, full of triumph, for the railroad men of Houston was drawn, nay shown as being almost upon us.

This is indeed an enterprise of inexhaustible interest. It is one that will do more for our State than any other which has occupied the attention of our people. The day is to come, and that, not many years hence, when New Orleans shall become the rival in shipping of New York. The day is coming when that city will be connected with every section of the Union, North and South, by railroad. The day is coming when we, of Houston, shall be able to go by rail, from the depot here, to every city of the United States, from Minnesota to Maine, and from Kansas to Florida; and not only this, but West by the most direct route to the Pacific coast. The day is coming when the traveler, from Boston, and he from San Francisco, will both meet here, four days from home, and meet in a city worthy to be called the half way house of the Atlantic and Pacific coast. The day is coming when intelligence of the first bale of cotton, of every crop, being brought to Houston, shall be sent hence to Liverpool in five minutes' time, and when the bale itself will follow its announcement and arrive in Liverpool in less time than some of our readers have spent in making the passage across the Gulf from New Orleans to Galveston. The time is coming, a good time for all of us, when enterprise and industry shall clothe the vacant territory of this vast State with production, shall build up manufactories in our midst, shall enlarge the borders of our cities, shall make of us a great people, and of our State an empire in consequence.

Some of us were thinking of these things also, while under the hoiling sun yesterday morning we were throwing the first earth on the road bed of the Sabine and Galveston Bay Railway and Lumber Company; and if, under the influence of these thoughts we suffered ourselves to be for a moment carried beyond this, the day of small things, and pledged ourselves to work with renewed energy for the completion

of these enterprises now in our hands, need any feel surprise thereat?

The company enjoyed themselves thus pleasantly for an hour or two, when, on motion of B. A. Shepherd, they adjourned, to meet one year from that day, on the banks of the Trinity. And when that meeting comes off, may we all be there to see!

#### LANDS OF THE ILLINOIS CENTRAL RAILROAD COMPANY.

To the Editors of the Chicago Daily Press:

LAND DEPARTMENT, ILLINOIS CENT. R. R. CO.,  
CHICAGO, Ill., Sept. 1, 1877.

The following is a statement of sales of the Company's lands for the month ending August 31st, 1877:

##### CONSTRUCTION LANDS.

25,469.17 acres sold at an average of \$12 44	
per acre.....	\$317,016 39
Interest in advance, received in cash.....	18,904 99
Interest at 3 per cent. for 2, 3, 4, 5 and 6 years, added in notes.....	18,904 99
Total.....	\$354,726 37
Net cash received.....	\$ 2,878 64
Interest ".....	18,904 99
Notes ".....	333,032 74
	\$354,826 37

##### FREE LANDS.

5,124 acres sold at an average of \$13 72 per acre.....	\$70,311 43
Interest in advance, received in cash.....	4,186 04
Interest at 3 per cent. for 2, 3, 4, 5 and 6 years, added in notes.....	4,186 04
Total.....	\$78,683 51
Net cash received.....	\$ 544 00
Interest ".....	4,186 04
Notes ".....	73,953 47
	\$78,683 51

##### INTEREST LANDS.

640 acres sold at an average of \$18 75 per acre.....	\$12,000 00
Interest in advance, received in cash.....	572 40
Interest at 6 per cent. for 2d and 3d years, added in notes.....	572 40
Total.....	\$13,144 80
Net cash in advance.....	\$ 2,460 00
Interest received.....	572 40
Notes ".....	10,112 40
	\$13,144 80

##### TOWN LOTS.

Sales of town lots, applicable to interest fund.....	\$3,545 00
Interest received in cash.....	119 80
Interest added in notes.....	56 59
Total.....	\$3,721 39
Net cash in advance.....	\$1,548 34
Interest received.....	119 80
Notes ".....	2,053 16
	\$3,721 30

##### AGGREGATE.

	Principal.	Interest.	Total.
25,469.17 acres construction lands sold for.....	\$317,016 39	\$37,909 98	\$354,826 37
5,124 acres free lands sold for.....	70,311 43	8,372 08	78,683 51
640 acres int. lands sold for.....	12,000 00	1,144 80	13,144 80
Total, 31,233 17; sold for.....	\$399,327 82	\$47,326 86	\$446,654 68
Add town lots, sold for.....	3,545 00	176 30	3,721 30
Total for all.....	\$402,872 82	\$47,503 16	\$450,375 98

JOHN WILSON, Land Commissioner.

The August receipts on the Galena and Chicago Road are reported \$169,842 against \$225,420 the same month last year. The New Jersey Central Road \$61,484, against \$50,761 same month last year.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds	Name of Company.	Quot' of Stock	Ln'n of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hmp'sr	173		5,000,000.00				
498,800	6			1862-3	2d	.....	Androscog'u & Kennebec	54.35		1,400,000.00		269,475.46	110,246.98	none.
199,060	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	86.5		1,000,000.00	129,000.00	278,122.74	173,780.74	4 pr. ct. 6m
52,046				now	"	.....	B'ng'r, Old T. & Milford..	12.5		135,000.00	52,046.26	39,104.40	8,671.61	8 pr. ct.
500,000	0		N. Y.	1866	1st mortgage.	.....	Boston & Worcester...	44 5-8		4,500,000.00	500,000.00	1,108,781.90	437,032.03	15,000 lb 53
500,000	7			1857-9-62	Domestic.	.....	Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000	7			1864	4th mortgage.	.....	Central Ohio.							
200,000	7			1872	1st mortgage.	.....	Champ'n & St. Lawrence	43		1,372,800.00	1,001,087.00	163,200.00	77,700.00	10 per ct.
577,187	6			1874	2d	.....	Ch'r'l'to & South Carolina.	110		1,750,000.00	280,000.00	291,219.86	47 per ct.	\$72,300
192,200	7				Domestic.	.....	Ch'go, Burl'ng'n & Quincy.	138		3,746,960.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
380,000	7			4-7	1st mortgage.	.....	Chicago, Fulton & Iowa.							
1,440,000	6-7-8		N. Y.	8-9	2d	.....	Cin. Wil'ng'n & Zanesville	131		1,761,149.16	2,241,500.00	921,491.96		
1,300,000	8			8-76	Convertible.	.....	Cleveland Col. & Cin.	139		4,741,220		1 3,754	700,804	6 per cent.
374,000				1873	1st mortgage.	.....	Cleveland & Mahoning..	85		1,500,000.00				
1,500,000				1864	2d	.....	Cumberland Valley.....	52		1,218,300.00		160,511.56	81,101.56	\$33,250.24
532,000				1873	1st mortgage.	.....	Dayton & Cin. short line.	52		1,000,000.00	1,000,000.00			
104,000				1857-8-9	1st mortgage.	.....	Eastern Railroad.	936-10		3,345,000.00		665,578.79	288,057.84	\$234,133
305,500					1st mortgage.	.....	East Ten. & Virginia...	130		625,450.00		30,897.30	19,692.30	
540,000	6			1869	1st mortgage.	.....	Essex Railroad.	20		700,000.00				
43,000				1861	1st	.....	Evansville & Crawf'd'vle	109		2,228,657.0		243,970.42	136,061.90	\$133,281.45
400,000				1864	2d	.....	The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,837.81	3 per cent.
200,000	10				1st mortgage.	.....	Fox River Valley.	33		800,000.00				
100,000	6				1st mortgage.	.....	Fair Haven Branch.	15		300,000.00		50,381.33	14,822.45	\$166,240.00
100,000	6			1858	1st	.....	Georgia RR & Banking Co	233		4,156,000.00		1,068,202.59	357,689.42	\$166,240.00
300,000	7			1869-70	1st	.....	G't West'n R.R. of Can.	281 1/2		4,191,550.00		2,068,836.00		8 pr. ct.
4,000,000	6 1-9			1860	2d	.....	Housatonic Railroad.	74		2,000,000.00		339,196.50	176,529.98	
2,000,000	7			1860	1st	.....	Hudson River.	144		4,000,000.00		1,924,322.44	718,037.40	
1,812,000	7			1875	3d mortgage.	.....	"	144		4,000,000.00				
12,885,000	7			1875	1st	.....	Illinois Central R. R.	704		18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.
4,115,000	6			1860	Freeland.	.....	"	704		3,558,376.00				3 pr. ct.
3,000,000	7				1st mortgage.	.....	Indiana Central.	72 4				354,871.00		
600,000	7	Nov. 1		1862	2d	.....	Iron R. R.	13		123,700.00				
700,000	7	Jan. & July 1			1st	.....	Kentucky Cen. 2d Div.			719,500.00				
700,000	7				1st mortgage.	.....	Knoxville & Kentucky..							
218,000	7			1866	1st	.....	Laurens (S. C.) R. R.	32		166,000.00		23,233.59	14,233.59	\$8,000
1,000,000	7			1875	2d	.....	Louisville & Nashville..	184		300,000.00		50,234.71	14,149.13	10 pr. ct
1,000,000	7				2d	.....	Lowell & Lawrence	12 35		2,697,090.00		587,236.57		162,277.50
2,000,000	6			1868	1st	.....	Mad River & Lake Erie..			2,697,090.00				\$24,000
2,500,000	7			1874	1st	.....	Manchester & Lawrence.	26		1,000,000.00				
2,000,000	7 and 8			1867	2d	.....	Marietta & Cincinnati...							
60,000	8			1881	1st	.....	Mexican Gulf R. R.	27						
429,000	8			1881	1st mortgage.	.....	Milwaukee & Horicon...	30						
329,000	8			1884	1st	.....	Mineral Point R. R.	32						
6,000,000	6			1869	2d	.....	Mobile & Ohio.	497		10,000,000.00		253,495.96	162,892.24	7 pr. ct.
500,000	7			1864	1st mortgage.	.....	Nashua & Lowell R. R.	15		600,000.00		193,752.42	55,501.74	2 pr. ct. 6m
2,356,000	7	May & Nov.	N. York	1864	Con. till 1859.	.....	New Haven & Northm'tn	55		922,500.00		7,707,348	3,609,481	3 pr. ct. 6m
8,892,600	6	June & Dec.	N. York	1873	1st mortgage.	.....	New York Central.	555		23,067,400	14,763,897			
3,000,000	7			1863	2d	.....	N. Y. & Harlem R. R.	133		5,717,100.00		1,040,393.26		
936,000	6			1864	1st	.....	" " " " " Pref.							
411,700	7			1863	1st	.....	N. Y., Prov. & Boston...	50		1,58,000.00		245,712.00	51,544.40	
500,000	7				1st	.....	N. Lon., William'ston & Pal.	66		1,700,000.00		120,571.50		\$25,000
300,000	6				2d	.....	"							
1,500,000	6			1873	1st mortgage.	.....	Pontchartrain R. R.	5		500,000.00				
1,000,000	6			1873	2d	.....	N. O., Opel'o's & Gr. T. West.	62 1/2		6,00,000.00		116,795.00	366,118.80	7 pr. ct.
2,000,000	6			1885	3d	.....	N. Y. & New Haven.	103 1/2		3,000,000.00		1,007,666.48		2 pr. ct. 6m
1,500,000	7			1859	1st mortgage.	.....	North Western Va. R. R.							7 pr. ct.
3,000,000	7			1877	1st mortgage.	.....	Northern (N. Y.) R. R.	118		2,000,000.00		600,000.00		
419,300	5			1860	1st	.....	North Missouri R. R.	19 2				25,176.74		2 1/2 pr. ct.
221,800	6				"	.....	Norwich & Worcester RR	60		2,111,500.00		204,336.33		
400,000	6			1866	1st mortgage.	.....	Ogd'nsb'g, Clay'ton & Rome	94				289,690.10	137,875.83	5 pr. ct.
1,200,000	6			1876	2d mortgage.	.....	Orange, Simcoe & Huron	83 3		2,957,500.00		276,539.02		
300,000	7			1868	1st mortgage.	.....	Peoria & Bureau Val. R. R.	47		1,500,000.00				6 pr. ct.
300,000	8			1873	1st	.....	Philadelphia & Trenton.	28 1-5		1,000,000.00				
350,000	6			1861	1st mortgage.	.....	Portsmouth & Concord..	47						
800,000	7			1864 to 1874	1st	.....	Putnam & Watertown...	76		2,000,000.00				
1,260,000	0			20 years.	1st mortgage.	.....	Rutland & Washington..	62 1/2		950,000.00		68,523.42		
500,000	6				1st mortgage.	.....	St. Louis & Iron Moun. R.R	86		6,000,000.00				
250,000	6				1st	.....	Salem & St. Louis R. R.	168 3/4		400,000.00				
317,000	7				2d	.....	Snd'sky, Mans'fd & New'k	116				75,246.06		19,050.64
300,000	7				1st mortgage.	.....	Sullivan Railroad.	26		500,000.00				
198,000	7				1st mortgage.	.....	Tennessee & Alabama...	145				39,586.44		11m. 15 pr. ct
262,500	7			1861	2d	.....	Terre Haute & Richmond	73		1,294,450.00				
				1840	3d	.....	Toledo, Wabash & Western	242		1,000,000.00				
				1875	1st mortgage.	.....	Troy & Boston.							
2,500,000					1st, 2d, 3d	.....	Vicksburg & Jackson.	45					165,076.04	2 pr. ct.
596,000	7				1st mortgage.	.....	Virginia & Tennessee.	215		3,000,000.00		322,048.60		
200,000	7				2d	.....	Westchester (Pa.) R. R.	31		165,000.00				
					1st	.....	Wilmington & Manchester	171						
					2d	.....	Winchester & Potomac...	32						
					3d	.....	Worcester & Nashua...	45 69						



## LONDON QUOTATIONS

OF

## AMERICAN STOCKS AND BONDS.

July 31st, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858, ..	"	—
Ctn. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	60	64
Erie, 3d Mortgage, 1863, ..	78	82
" Sinking Fund, ..	73	78
" conv. 1862, ..	62	67
Grand Trunk (Canada) Debenture, ..	87	88
Great Western " conv., ..	107	109
" " non-conv., ..	109	113
Illinois Central, 1st Mort., 7's, ..	87	88
" " with option 70 per cent. ..	103	106
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	82	84
Little Miami 1st Mort. not conv. 6's, ..	—	—
Marietta and Cincinnati, 1st Mort., ..	—	—
Michigan Central, conv., 8's, 1860, ..	90	91
do do do 1869, ..	90	91½
N. York Central. No Mort. Not conv., 6's 80, ..	89	91
" " conv., 7's, ..	89	91
Ohio and Mississippi, 1st Mort., ..	—	—
Ohio and Pennsylvania, Income 1872, ..	65	68
Panama. No mort. conv. 1866, ..	—	—
Pennsylvania, 1st Mort., conv., ..	86	88
" " Sterling, 2d Mort., ..	90	95
Stenbenville and Ind., 2d Mort., ..	—	—

The quotations given are sterling quotations. The American values to be obtained by adding on exchange generally about 10 per cent.

## SALES AT THE NEW YORK STOCK BOARD—Sept. 14.

\$2,000 Virginia 6's, ..	87
24,000 Missouri State 6's, ..	70½
2,000 Tenn. State 6's, '90, ..	73
1,000 Hudson River Con. Bonds, ..	49
1,000 Illinois Central R. R. Bonds, ..	83½
2,000 Erie R. R. Bonds, 7's, ..	53
50 shares New York Central, ..	70
8 " Del. & H. C. Company, ..	105
200 " Penn. Coal Co., ..	70
200 " Pacific Mail St. Co., ..	67½
100 " Panama, ..	80½
53 " Mich. Cent., ..	63½
50 " Erie, ..	20
500 " Reading, ..	47
100 " Mich. S. & N. Ind., ..	17½
450 " Harlem R. R. stock, ..	7½
34 " Illinois Central, ..	92
642 " Cleveland & Pittsburg, ..	15½
20 " Cleve., Col. & Cin., ..	41
150 " Galena & Chicago, ..	71½
14 " Chicago & Rock Island, ..	70½
50 " Cleveland & Toledo, ..	35½
500 " LaCrosse & Milwaukee, ..	14

## MONETARY AND COMMERCIAL.

The past week has been marked by another bank suspension. The Citizens' Bank of this city closed its doors on Monday. It was understood at the time of closing that its total liabilities were about \$600,000, and that its assets, available within 60 days, were over \$800,000; that it had \$50,000 in cash. The managers, feeling themselves unable to meet the run which had gone on steadily since the closing of the Ohio Life Insurance and Trust Co., deemed it best to suspend. They state that they expect to resume within a short time. This is the course pursued by them three years ago. The suspension of this bank, in which there is no claim to have lost any large amounts of money, is the legitimate consequence of a bank depending solely on its depositors for the money it loans on discount. The Citizens' Bank allowed six per cent. interest on deposits, and charged from 12 to 24 per cent. (usually the latter) for discounts. To make the interest paid the depositors it was compelled to use the deposits, and the result is as we have seen. The principle is wrong, and the practice cannot be otherwise.

We trust we have now got to the bottom; that the institutions in our city which could be broken by a slight cause are gone, and that the balance of our monied institutions are safe.

The lesson we have learned, although a severe one, will, we trust, be salutary. High rates of interest are a curse to the borrower and to the lender. Neither is safe however apparently good the security. The Ohio Life Insurance & Trust Co., while nominally charging but six per cent. for discounts here, was indulging in New York in the largest kind of figures, and the consequence is inevitable—the most influential and useful institution in the West is swept away by the folly of one man entrusted with too great powers. The blow came like a thunderbolt in our midst, but it will teach us to

learn what our banks are doing abroad before we place implicit confidence in them at home.

Stocks are still feverish. The transactions, both here and in New York, resemble more the bets of gamblers than the actual sales of regular business. We therefore omit our quotations for another week.

The bank statement of the city of New York is regarded as a satisfactory one. There is an increase in specie and in undrawn deposits and a decrease in circulation and in discounts.

The following is an official table of the Exports and Imports to New York for the year ending June 30, 1857:

Imports—Specie, ..	\$12,461,799
Free goods, ..	\$4,267,507
Dutiable, ..	294,160,835
Total Imports, ..	360,890,141
Foreign Exports—Specie, ..	9,068,570
Free goods, ..	4,313,862
Dutiable, ..	10,591,647
Total, ..	23,964,079
Domestic Exports—Specie, ..	60,078,352
Merchandise, ..	278,966,713
Total, ..	\$338,985,065

Total Exports—Foreign and Domestic, .. \$362,959,144  
Resulting balance in favor of U. States, .. \$2,059,003  
The comparative figures with the year 1856, show the following result:

Imports.	Exports.	Excess of Exp'ts.
1856, .. \$314,639,942	\$326,965,918	\$12,325,976
1857, .. 360,890,141	362,949,144	2,059,003

Exchange in our market has ruled 2 per cent. selling to 1½ buying during the week, with no disposition on the part of the banks to add to their balance in the east. Eastern notes are looked upon with suspicion.

The Central Bank, Indianapolis, and the Bank of the Capitol of the same place are reported suspended. The notes of the Miami Valley Bank are discredited.

☞ The Banks of Massachusetts, out of Boston, in their statement to the 5th inst., show the following items:

Capital, ..	\$28,192,495
Discounts, ..	49,330,964
Specie, ..	1,100,080
Deposits, ..	6,860,664
Circulation, ..	15,769,025

BALTIMORE & OHIO R. R.—The regular monthly meeting of the Directors of the Baltimore & Ohio Railroad took place in the Camden street building. The following is a statement of the transportation into the city of Baltimore during the month of August:

Bark 535 tons, coal 48,660 tons, fire brick 9 tons, flour 56,260 bbls., grain 1,981 tons, granite 571 tons, lard and butter 100 tons, leather 214 tons, cotton 5 bales, wool 2,370 bales, soap stone 160 tons. Live Stock, viz—Hogs 7,836 head, sheep 4,978 head, horses and mules 110 head, horned cattle 474 head. Meal and shorts 189 tons, pork and bacon 1,562 tons, tobacco 334 hhd., whisky 7,611 bbls., Miscellaneous 712 tons, hay 9 tons, hemp 30 bales, flour from Washington Branch 3,309½ bbls.

The revenue for the month has been as follows:

	Main Stem.	Wash. Br.	Total.
For passengers, ..	\$ 74,308 44	\$20,568 88	\$103,877 32
For freight, ..	335,553 92	8,927 64	344,480 56
	\$409,861 66	\$38,496 52	\$448,358 18

A comparison of these receipts with those of August, 1856, shows the following result:

	Main Stem.	Wash. Br.	Total.
August, 1857, ..	\$409,861 66	\$38,496 52	\$448,358 18
August, 1856, ..	397,562 91	29,662 79	427,225 70
Increase, ..	\$12,298 75		\$12,298 75
Decrease, ..		\$1,166 27	\$1,166 27

Showing an increase on the Main Stem of \$12,298 75, a decrease on the Washington Branch of \$1,166 27, and a total increase of \$11,132 48. Of the increase on the Main Stem \$6,464 26 is from passengers.

PIKE COUNTY RAILROAD.—The Hannibal Messenger says:—"We learn from the Pike County Union that the contract for building the road has been let to three responsible parties, as follows: Chamberlain & Vansyckel have sixteen miles on the Western end—Harris & Co., six miles of the central portion, and Kirkpatrick & Martin have the remainder, from the Summit to the Illinois River.

The price to be paid is twenty cents per yard for excavation, one-half in cash, one-half in city and township bonds. Our old friend SAM'L D. BARNES, late of the Hannibal and St. Joseph railroad, has been appointed engineer and will commence the survey on the 15th of the present month, when the work will be commenced from the Illinois river, and prosecuted as rapidly as funds are provided.

MAIN TRUNK R. R., GA.—Our readers are aware that the Legislature of Georgia, at its last session, authorized a subscription to the capital stock of this company of one million dollars. The following proviso was, however, inserted in the bill:

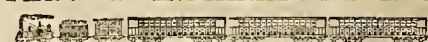
"But no payment shall be made on the part of the State unless the Savannah, Albany & Gulf Railroad Company, and the Brunswick & Florida Railroad Company shall have released any claim which either of said companies have or claim to interfere with the location of said road, on account of any privilege granted in the charters of either of them."

The Directors of the Brunswick & Florida Railroad Company refuse to execute such release, and thus, for the present, prevent the State subscription to the Main Trunk Railroad. The friends of the road propose to procure a bill releasing the State from this condition, and thus secure the building of the road.

☞ On Friday last the first locomotive ever run in the State of Arkansas ran over the track of the Memphis and Little Rock Railroad for a distance of three miles, as far as the road is completed from Memphis.

THE SUGAR PROSPECT.—A letter from the Paris Plaquemines, Louisiana, in the New Orleans Picayune, says that the sugar planters of that State will have no cause to complain of this year's crop. The cane will mature earlier this season than usual, and the new sugar will be manufactured, and come into market two or three weeks in advance of former seasons.

## PERU &amp; INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Logro, Huntington, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T., W., & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Frtght. Ag't.  
Indianapolis, Sept. 16, 1856. [mh29-1y.]



# THE ALABAMA AND FLORIDA R. R. COMPANY.

We give to our readers, to-day, with great pleasure, copious extracts from the report of the President of the above Company, whose road extends through Alabama from Montgomery down to the Florida State line, in the direction of Pensacola. We also give extracts from the report of the Chief Engineer of the same road. These combined, speak most favorably of the condition and prospects of the present and future administration of affairs, and promise to the public, the connection of New York and the great Lakes with the Gulf of Mexico at Pensacola in 18 or 24 months.

The distinguished President of the road, Charles T. Pollard, Esq., could well say in his salutation to the stockholders of the Company that they were assembled in their annual meeting for 1857, under more encouraging prospects for the completion of the road than he had reason to hope would be the case at their last annual meeting.

The wise and liberal policy which he recommends for applying the lands donated by Congress (355,000 acres) to aid in the construction of the road for 50 miles through Conecuh county, in continuation of the Florida road coming up from Pensacola to the Alabama State line, at once insures the completion of the whole line from Pensacola to Montgomery by the 1st of July, 1859, if not at an earlier day.

We understand that responsible parties are ready to take the contract for grading, cross-tying, and bridging the entire line through Conecuh county from the termination of the Pensacola road at the State line to Butler county. The lands will more than supply the iron rails, rolling-machinery, depots, &c.

The intelligent Engineer, Mr. S. G. Jonea, truly remarks that—

"The diversion of the travel from the old established route from the South-West to the North-East, is now clearly and painfully perceptible to those whose position impels them to note the change and the improvements in the Railroad connections of the West, within the next 12 months must greatly increase the drain of travel already begun. Our remedy for this evil is the completion of the road, by which, if we do not recover all the travel heretofore enjoyed, we shall gain a new trade and new travel, more than sufficient to compensate us for our losses."

This new trade and new travel will be opened to the old Metropolitan route to New York, by the steam communication between Pensacola and Cuba, Texas, Mexico and California and the Pacific, by the Tehuantepec Isthmus.

We commend the whole Report to the careful reading of every one interested in the great road which is to connect Pensacola with the North. In the meantime want of room compels us to furnish only extracts from it.

Mr. Pollard says—

"If this is done, I feel confident the iron can be obtained by the pledge of the lands granted by Congress to assist in building the road, and that by the first of July 1859, the connection between Montgomery and Pensacola will be perfected.

"Efforts are now being made in Butler county to obtain a subscription of \$50,000 to complete the road from Fort Deposit to Greenville, and if this can be done by the 1st day of October and put in the form of Bills of Exchange, made payable in March and April,

1858, the Board can with such paper and the credit of the Company, purchase the 1000 tons of iron which it will require to lay down the twelve miles of road between Fort Deposit and Greenville.

\* \* \* \* \*

"If the people of Conecuh county should desire it and will make provision for the estimated cost, I would suggest for your consideration, the propriety of instructing the Board to put under contract the road from the Florida line through the county of Conecuh to the Butler county line, whenever subscription to the Capital Stock of the Company can be obtained and put in such form as may be made available for an amount sufficient to cover the estimated cost of grading, bridging and preparing the road for the iron through the said county of Conecuh, and that whenever such a contract is made the lands lying in said county, that may be acquired under the Act of Congress, granting lands to assist in the construction of the road, be made use of by sale or mortgage to provide iron and such other materials and machinery as may be necessary to put it in operation—and as the largest portion of these lands, amounting, from the best information I have been enabled to obtain, in the aggregate to 355,000 acres is situated in the county of Conecuh. I apprehend but little difficulty in being enabled to provide for the purchase of the 4,500 tons of iron which it will require to lay down the road through the county.

"The importation of this iron for the Southern section of the road through Pensacola, will save to the Company all of eight dollars per ton in cost of it laid down, and from the rapid progress now making on the road from Pensacola to the Alabama State line under the energetic management of its able President, Maj. Chase, there is every reason to feel assured that if the Southern section of this road through the county of Conecuh was at once put under contract, the Florida road would be completed in time to transport the iron from Pensacola.

\* \* \* \* \*

"The importance of it can hardly be estimated. If it could be put under contract this coming winter, which I have strong hopes of seeing done, and all that is required for the counties of Butler and Conecuh to do could be accomplished, the whole of the road South of Fort Deposit could be at once put under contract and in two years trains would be loaded with coal at the Pits in Shelby and Bibb counties, and in 24 hours delivered on the shores of the Gulf, which would do more to develop the value of the coal region of the State than can be accomplished by any other route yet projected."

Mr. Jones reports—

"No material variation was made from the line of original survey until the summit of the ridge dividing Sepulga and Murder Creek was attained. At that point the location was thrown to the right, passing through Evergreen, Conecuh county, and descending into the Valley of Murder Creek, which it crosses near Perryman's Bridge, 10 miles above the crossing of that stream on the original survey. The location is then traced down the west bank of Murder Creek to its confluence with Conecuh River, and down that stream to a junction with the Alabama and Florida Railroad, of Florida, at the Florida line.

"The nearest point of approach to Sparta, the Capital of Conecuh, is  $1\frac{1}{2}$  miles; although the line fails to pass through the County Town, it nearly bisects the county, and in

that way secures a more equal distribution of its benefits amongst her citizens, and should hence find more general favor with her people.

"The liberal offer of some of the wealthy and enterprising citizens of the county to grade the road through its limits and furnish the cross-ties for the same, relying entirely on their county subscription for payment, which was submitted to the Board last summer, will doubtless be renewed this, as energetic measures are now being taken to make that subscription commensurate with the deep interest her people feel in the road. The amount required to complete the graduation, and box culverts and furnish the cross-ties through that county, at the prices on which their proposition is based will be \$175,000; a small amount for such a county as Conecuh to contribute to an enterprise passing for nearly 50 miles through her borders, costing millions of money, and destined to add so immensely to her growth in wealth and population. Conecuh is essentially an interior county, many of her citizens being from 50 to 70 miles from the nearest market; a Railroad is hence a necessity to her, and now that so little effort is required to secure it, that surely will not be wanting. Transcripts of all the land entries at the offices at which lands along the route of our road were subject to entry, show within the limits of 15 miles on either side of the road, 355,000 acres of land applicable to the grant made by Congress for the benefit of this road, without taking into account that which, in consequence of entries improperly allowed, will under recent decision of the Commissioner of the Land Office, revert to the Railroad.

"At the most moderate estimate these lands will be worth to the Company a million of dollars, and if such arrangements be made as to reserve them from market until the completion of the road, a larger sum would undoubtedly be realized from their sale. Few companies have received such a bonus from Government, and if its true bearings on the value of the stock were duly considered and rightly understood, there would be no lack of means to push forward the work to a speedy completion.

"If to this consideration you add the prospect of the connection with Selma by a branch of this road, and so with the coal fields of the State, ensuring to the road the day it is opened, a business, in the shape of coal freights alone, largely exceeding \$100,000, and which must yearly increase, surely no farther inducements need to be named to secure the requisite additional subscription."

## THE WELLAND RAILWAY.

J. H. Ingersoll, Esq., of St Catharines, was in the city yesterday, with maps, reports, &c., relative to the Welland Railway now in course of construction from Port Colborne on Lake Erie, to Port Dalhousie on Lake Ontario, and immediately alongside the Welland Canal. One of the prime objects in view by the Directors—the head of whom is Wm. H. Merritt, Esq.—is to facilitate the transportation of grain from the Northwestern States to the Atlantic. The road is only twenty-five miles in length, and it is proposed to have immense warehouses, with elevators erected at both ends of the road, so that vessels may discharge their cargoes of grain at Port Colborne, and have it run down to Port Dalhousie on cars, where it may be shipped in



vessels of 900 tons burthen. The cost of conveying a bushel of wheat over the road is estimated as follows :

Elev'g from Vessel at Port Colborne.....	2½ mills
Movement by Railway, 25 miles, and	
Discharging at Port Colborne.....	½ do
25 for Contingencies.....	2 1 Ct.
Profit.....	2
In all 3 cts.	

The time generally consumed by a vessel in going through the Welland Canal is three days; but the grain of a vessel containing 20,000 bushels may be transported from Port Colborne to Port Dalhousie in three hours, and the advantage of shipping in large vessels of a thousand tons burthen is said alone to compensate for the cost of transportation on the Welland Railway.

But the transportation of grain is not the only object in view by the Directors, as the following extract from their prospectus will show :

"It will be borne in mind that traffic in grain was not originally contemplated, as the following extract from the prospectus issued in June, 1856 shows ; 'Immediately on the arrival of steamers at either end of the Welland Canal, light and valuable freight will be transferred by Railway from one steamer to another in the same line, having previously passed through the canal, and ready to proceed to her port of destination on the opposite lake. By this arrangement heavy freights will not be subject to transshipment, while light freight will secure speed and certainty.' Also, from the following extract from the prospectus published in England, in September last : 'Under the combined system of railway and water transit, the business will be conducted in the following manner :—On the arrival of a steamer at the entrance of the canal, passengers and light and valuable freight will be transferred to the railway, and within two or three hours placed on board another steamer, which, having previously passed through with another cargo will wait for the railway traffic ; thus a continuous line will be opened from every port on or below Lake Ontario, with every port on or above Lake Erie, ensuring the same dispatch and punctuality in delivery as if the traffic were entirely conveyed by railway. Passengers, live stock, butter, cheese and valuable merchandise will be transferred to the railway, while timber, lumber, iron, grain, salt and cheap bulky articles will go through the canal, and each will add to the business of the other. So strong was this opinion at the time, that the following extract of a letter from Robert Stephenson, Esq., President of the Society of Civil Engineers, to the Hon. Wm. Hamilton Merritt, 27th August, 1856, was suppressed. He says, 'You have regarded the railway as an auxiliary to the Welland Canal, for the purpose of accelerating the conveyance of light goods. You are probably correct in taking credit for this portion of the Canal traffic, but independant of this source of revenue, I believe the line of railway projected between the two Lakes and nearly parallel with the Welland Canal, will prove a profitable investment of capital.' It is now referred to, to show the opinion the eminent Engineer then entertained of the capacity of railways successfully to compete with canals in our heavy freights, although not fully understood until demonstrated by the returns of the new York Canals for 1856."

The Board have deemed it useless to enter into any estimate of profit to be derived from

the through passenger and other traffic between Toronto, the Suspension Bridge, Buffalo and Dunkirk, or the local traffic between Port Dalhousie, St Catharines, Welland City, Thorold, Allanburgh, Port Robinson, Merrittsville, the county town, Junction, at the Grand River branch of the Welland Canal, Petersburg, and Port Colborne, through the centre of the counties of Lincoln and Welland, (containing a greater population in the same distance than any other equal extent of country in Canada, and the most extensive water power in America, on the line of the Welland Canal,) all of which will be connected with Toronto twice each day.

A new branch of traffic will also be opened by the construction of a Railway of 18 miles in length, now in progress from the coal beds in McKean County, Pennsylvania, to the New York and Erie Railway, which will bring this valuable description of traffic on a descending grade only 56 miles in length to Dunkirk, and furnish the nearest and cheapest supply for this portion of Canada.

This road will not lessen the traffic through the Welland Canal ; neither, after the locks are enlarged, will it diminish it on the railway, inasmuch as the greater the dimensions of the locks the longer will be the time occupied in passing them. The leading object in its construction was to secure speed and certainty in their delivery ; and its only competitors are the New York Central and the N. Y. and Erie Railways.

The running expenses of this road will be very light. From Port Dalhousie to Port Colborne, with the exception of two miles, the road is an inclined plane ; and one locomotive, it estimated, will keep one train of cars loading, one moving, and one discharging—equal to running 100 miles per day. The following is the estimate of the earnings per season :

Allowing 10,000 bushels each trip down, 20,000 bushels at 2c.....	\$400
Allowing 75 tons each trip up, 120 tons at 75c..	90
Will make net earning per day.....	\$490
Which for 200 days during the navigable season at \$490 per day.....	\$98,000
With an ample supply one locomotive will earn a dividend of nearly 10 per cent on the capital of \$100,000, the estimated cost of Railway from Lake to Lake	

We have seen the subscription list—which amounts to somewhere in the region of \$750,000—and the first name on that list is that of Robert Stephenson, the great railroad engineer. The other names are those of the best English and Canadian bankers, merchants, and others. In order to finish the warehouses, fit up elevators, &c., only \$300,000 more stock will be issued.

The subject of the importance of this Railway is now under consideration by the Board of Trade of this city, an expression of whose opinion will be made in a few days. That it cannot fail to vastly benefit Chicago, and all lake ports, it is just as evident as that the St. Lawrence is the great natural highway for the produce of the Northwest. Our opinion is, that nothing short of a ship canal from Georgian Bay to Toronto, or at any other equally advantageous point, will meet the demands of the commerce of the great Northwest, but we hail with pleasure the opening up of the other routes, and will at all times give them our hearty support and co-operation. The Welland Railway is now about half constructed, and the design is to have it completed by the opening of navigation next spring.

## THE FULTON & LYONS FERRY CASE.

U. S. CIRCUIT COURT.—In the case of the Lyons and Fulton Ferry Company vs. Charles Walker *et. al.*, in which the plaintiffs sought to enjoin the defendants from running a ferry across the Mississippi River, between Fulton and Lyons and Fulton and Clinton, Judge Drummond gave his decision yesterday morning.

The facts in the case appeared to be that the defendants were the owners of a ferry charter between said points, granted by the Legislature of Illinois in 1853—that the complainants had a charter for a ferry granted in 1857, which they claimed worked a repeal of the prior grant. A motion for injunction had been previously made to the Supreme Court of the State and denied—and the plaintiffs then brought their bill in the Circuit Court of the U. S.

Judge Drummond, in giving his opinion, remarked that, the matter having been before the Judges of the State Court, and a decision there had, though not a final adjudication, this Court could not regard with any great degree of favor the present application, and the case must be a very clear one, where it was apparent the State Court was in error, to call for the interposition of this Court—that an injunction would not be granted in a doubtful case.

It was claimed that the act of 1857 was a repeal of that of 1853, and took away the franchise and privileges conferred thereby. No words of repeal were to be found therein ; nor did the title of the bill, or its language, show that the Legislature intended directly to work such repeal. If repealed, it was only so by implication. It may be that the person who drew the act of 1857 intended that the Legislature should repeal the act of 1853 without knowing it, but this Court is not prepared to say that the effect of repeal is to be given to it. If the Legislature voted upon the question, and intended to repeal the former grant, and take away the rights and privileges granted under it, and to destroy and annul the franchise, it is probable they would have stated the repeal plainly and openly. If the idea of repeal was before that body at all, it follows that either the Legislature did not intend to repeal the former act, or they were willing to leave the question to the Courts whether the second grant did so work a repeal.

It appears that the defendants either had some notice or suspicion that some such act was to be asked for, and that a remonstrance was drawn ; but it does not appear that the remonstrance ever came before the Legislature, in fact, and therefore no conclusion can be drawn from that circumstance in favor of such a construction as is asked. Whether the Legislature—intending to repeal the first grant and deprive the defendants of the valuable franchise possessed by them—should not, in good faith, have notified the parties, and given them some opportunity for a hearing, is a matter not necessarily to be taken into view.

If such a construction can be given as that both grants shall stand together, it is the duty of the Court to give it, since repeals by implication, especially where pre-existing private rights are to be affected, are not to be favored. The Court will not infer that the Legislature intended to repeal a former grant unless compelled to do so by the language of the subsequent act. Such a construction may here be given.

In relation to the running of a free ferry by the defendants, if they have no right to run without taking tolls under this franchise—or if they are running without any franchise—the remedy is in the State Courts, to which remedy the parties must be left. The injunction is refused.

Blackwell & Scates for complainants ; Fuller & Arnold for defendants.—*Chicago Press.*

## To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great Wabash River, in White county, and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each ; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville ; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
6 South William street, N. Y.

feb19-1m



## The Polytechnic College Of the State of Pennsylvania.

WEST PENN. SQUARE.

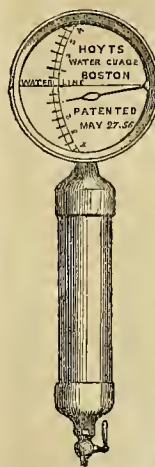
The Polytechnic College, incorporated by the Legislature, 1853, on the plan of the industrial Colleges in Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to Dr. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia, Aug. 20—6t

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPLAND, Gen. Agent,  
No. 66 Broadway, N. Y.

jy30

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by  
GRAY, HEMMINGWAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.  
MIDDLETON, WALLACE & CO.,  
jan 8 ly 119 Walnut st., Odd Fellows' Building,

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAWFORD'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

## SAFETY & ECONOMY.

JAMES HARRISON JR'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

dec 11 Second avenue, corner of 2d street, N. Y.

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

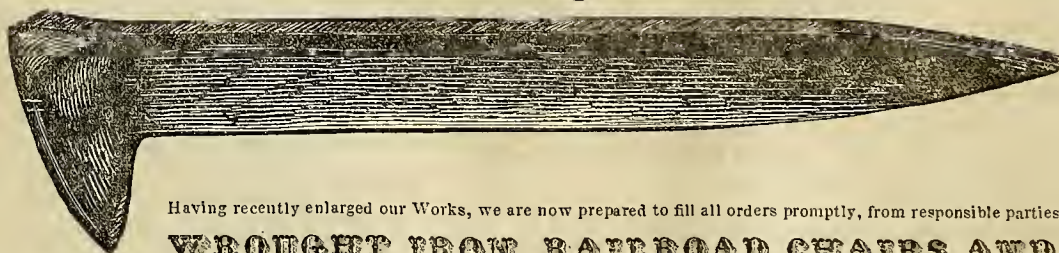
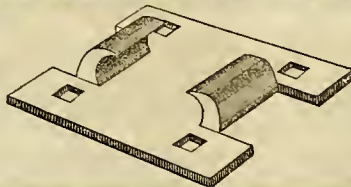
Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-ly

## CINCINNATI WROUGHT-IRON

# RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Loller Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 2½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent.

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT TERRE HAUTE with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

July 10 Sup't Terre Haute &amp; Richmond R. R.

## PAGES

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the T. Shove Mill, in connection with their improved Ratchet Double Setting Head Blocks.

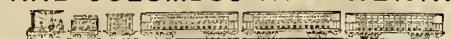
They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

**Also,** Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

**FOURTH TRAIN.**—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL further notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AUORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

July 22

1856.

1857.

Summer Arrangement.

1857.

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH,	INDIANAPOLIS,
PHILADELPHIA,	TERRE HAUTE,
CLEVELAND,	ST. LOUIS,
DUNKIRK,	LAFAYETTE,
BUFFALO,	LOGANSPORT,
NIAGARA FALLS,	CHICAGO,
NEW YORK,	BOSTON,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPOUT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Washab Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS** Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.**

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.  
Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:30, 6:35 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Platers' Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
22 PLATT STREET, New York.



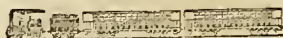
N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.

## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27.

RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of

## LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES. From ½ to 5 inches bore, with Screw and Socket Connections. T's, I's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.

PHILADELPHIA.

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.]

J. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS. DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,

NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush

Printed & Unrented. Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Emameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width.

Oil Cloths for Head Linings. Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS; Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation  
sepi8 DOREMUS & NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

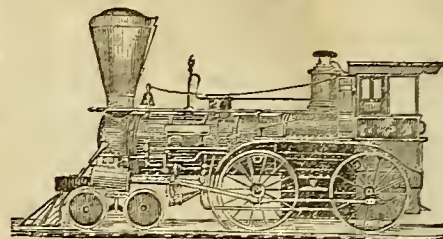
Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skilful artists. Mines explored, new Works laid off, and Geological plans prepared.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted

Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Couch Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Condutors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
1006.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

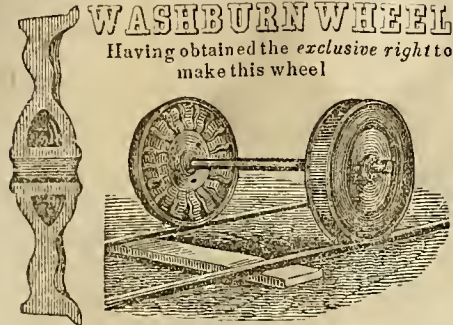
Orders thankfully received and promptly filled at the shortest notice.

1 LVER MEAL. (The highest prize) awarded to these pumps at a Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies to the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Boils,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,  
Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,  
Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS.

Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks.

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgion's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE.

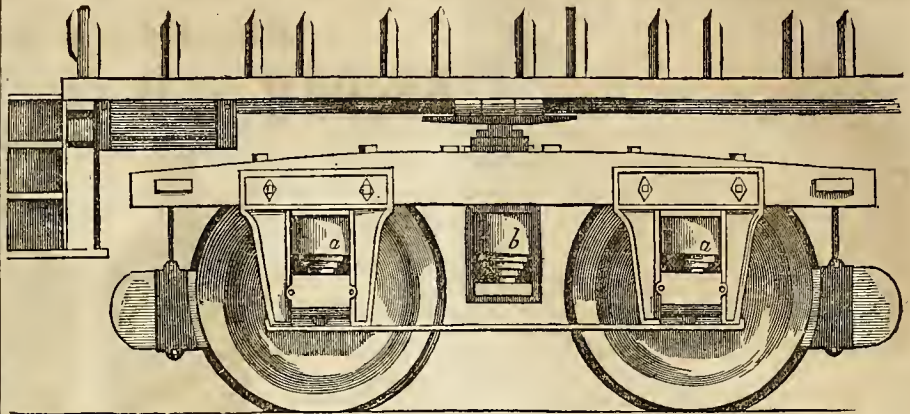
Baggage Barrows and Checks, Freight Trucks,  
**CAR FINDINGS,**  
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED.

Oct 23-ly

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT... M. D. WELLMAN... C. M. RU

## DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th JOSEPH DAVENPORT.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description,  
Second Class Passenger, Mail Express, and Baggage  
Cars; Freight, Cattle, four or eight wheeled Gravel Cars.

We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.

Jan 1.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c..

Cor. Railroad Avenue and Market st.,  
1 n2J NEWARK, N J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
ROBERT HARRIS, Sup't.  
Racine, May 15, 1857. my21

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cin- cinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, West side, 5 doors north  
Madison House.  
Cincinnati, Jan. 31, 1853. [Jan 1-ly] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
Feb 5-11 10 Wall st., near Broadway, New York.

**SILVER, GOLD, LEAD,**

And Other Minerals,

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUDAC, OASSEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Agt for the Company,  
Odd Fellows' Building,  
mar 26 Cor. Third and Walnut streets, Phila., O.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE

### RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine Street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana; and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad; and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in different freight when bought in Cincinnati instead of New York, besides a saving of time to receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

### ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

### Blank Book Manufacturers, No. 112 MAIN STREET, East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(SUCCESSORS TO JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

### POOLE & HUNT, Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS and AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.  
SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, New York City.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 255 H Street, Washington, D. C. apr 12

### Thorough Bed Stock FOR SALE.

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES."

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:  
THURSDAY MORNING,.....SEPTEMBER 24, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS PER ANNUM, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 31.

#### EDITORIAL.

The Money Currency of the United States—Banks, Bank Failures and Bank Notes.....	493
The Southern Line, Ca.....	493
Erie Railroad and the Other Side.....	494
Railroad Papers.....	494
Pacific Travel.....	495
Franklin R. R., Pa.....	495
Cincinnati & Fort Wayne R. R.....	501

#### RAILROADS.

Kentucky Central R. R.....	495
Chicago, Amboy & Upper Mississippi R. R.....	497
Cincinnati and Charleston R. R. Connection.....	499
Chicago, Iowa & Nebraska R. R.....	498
Houston & Texas Central R. R.....	503
Memphis & Charleston R. R.....	503
Indianapolis & Chicago R. R.....	503
Michigan Central R. R.....	503
Pittsburg, Ft. Wayne & Chicago R. R.....	503

#### MISCELLANEOUS.

Railroad Accident.....	501
Railroad Station Indicator.....	501
Aubin's Patent Improved Portable Gas Generator.....	502
Iron and its Manufacture.....	502
Lake Superior Items.....	503

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	500
London Quotations.....	501
Sales at the New York Stock Board.....	501
Monetary and Commercial.....	501

THE SOUTHERN LINE, CANADA.—We understand that the project of the Great Southern Line of Railroad in Canada, which was discussed last winter in Parliament, and the discussion of which brought to light the most stupendous system of legislative frauds we have ever seen exposed, is about to be accomplished by a union of the Woodstock and Lake and the Amherstburg and St. Thomas Railroad. The details have not yet transpired.

### THE MONEY CURRENCY OF THE UNITED STATES—BANKS, BANK FAILURES AND BANK NOTES.

Money is always an interesting topic, but never more so than when banks are failing, and discount scarce. There are many persons inquiring the general condition of the banks, circulation and coin. The official reports of the Government and the banks, enable us to arrive at a pretty accurate view of the present money currency of the United States.

In vol. 1, page 10 of the *Record*, we gave a complete and accurate statement of the currency of the United States in January 1853. We had no reason to correct that statement, for it was derived from the best authorities extant, and compared with the statements of Messrs. Gallatin and Crawford, in former years. The amount of coin and notes, January 1, 1857, were as follows:

Coin in 1856 (Treasury and Bank Report),	\$ 73,000,000
American Gold received up to Jan. 1857...	149,482,435
Total.....	\$222,482,435
Excess of Exports.....	12,500,000
Total Coin.....	\$203,982,435
Bank Notes in Circulation.....	153,958,358
Aggregate of Coin and Notes.....	\$357,940,793
Deduct Coin in Bank vaults and in the Sub-Treasury.....	63,483,536
Money of Circulation.....	\$294,457,257

At that time the population of the United States was about 25,000,000; so that the proportion of money to the people was about TWELVE to ONE in dollars. It is true that a considerable amount of both gold and silver is continually used in manufactures. There were also much gold obtained from the Southern States, which we have not included above; and there is a still larger amount brought from Europe by passengers, not included in the table of imports. We estimate then full *three hundred million of dollars*, as the actual currency *in use* in 1853.

In 1855, the Secretary of the Treasury (Mr. Guthrie), estimated the amount of gold and silver in circulation as follows, viz:

Coin in Circulation.....	\$191,000,000
Coin in Banks.....	59,000,000
Bank Notes.....	204,000,000
Aggregate.....	\$454,000,000
Deduct in Banks and Vaults.....	70,000,000
Money of Circulation.....	\$384,000,000

We believe this to be an over-estimate of bank notes, but not of coin. The amount of coin or bullion in the country can be correctly ascertained, because the statistics of mining and shipments are all correctly kept. The bank notes of circulation, we think, were about \$170,000,000. This would leave \$360,000,000 as the money circulation of 1855.

For 1857, we have the following material:

Bank Notes—New York.....	\$32,395,892
Bank Notes—Maine.....	4,242,658
Bank Notes—Georgia.....	9,876,623
Bank Notes—New Jersey.....	4,759,855
Bank Notes—Kentucky.....	13,373,000
Bank Notes—Vermont.....	3,970,658

The following are items made up from the returns of 1856:—

Massachusetts.....	\$ 22,000,000
Residue of New England.....	20,000,000
Pennsylvania.....	13,000,000
Maryland.....	5,000,000
Virginia.....	12,000,000
Residue of the South.....	31,000,000
Residue of the West.....	21,000,000
Bank Note Circulation.....	\$161,822,626

We suppose that from 1855 to 1857, the United States has not gained more than \$20,000,000 in specie, of which \$10,000,000 are in the Sub-Treasury, leaving \$10,000 for circulation. If this be so, the money of circulation in January, 1857, stood as follows:

Coin and Bullion.....	\$201,000,000
Bank Notes of Circulation.....	161,823,626
Money of Circulation.....	\$362,823,626

The population of the United States in 1857, is about *twenty-eight millions*, hence, the ratio of circulation to people, is that of 13 to 1. The proportion between money and people, at the three periods to which we have referred, was as follows:

	Circulation.	Proportion.
In 1853.....	\$294,457,257	12 to 1
In 1855.....	360,000,000	13½ to 1
In 1857.....	362,000,000	13 to 1

The money circulation of the United States has increased since 1856; but not sensibly since 1854, for it must be recollected that the Bank statements for January 1857 are made from previous returns; or that in fact that statement did not exhibit the reduced currency, consequent upon the financial disasters in November 1854.

It must be observed as a very favorable symptom of this period, that the *coin or bullion* among the people has continually increased for ten years past. The *coin currency* of these periods were as follows:

In 1853.....	\$140,044,899
In 1855.....	191,000,000
In 1857.....	201,000,000

Should the export of coin from the country continue as rapidly as it has gone on in the first six months of 1857, this statement must be reversed. In 1856–7 the gold *production* of the United States ceased to exceed the exportation; and at our present extravagant rates of importation, we shall soon export more gold than we produce. The effect of this would be a *collapse*, near or remote, of the whole system of commercial credit. The pressure and failures which have occurred at the present time are not the effect, as some suppose, of railroad debts, nor, as others suppose, of paper money. Railroad debts are mostly due at home, and paper money is already below the coin of circulation. The great cause of financial derangements is domestic *extravagance*, which from individuals to nations, from families to merchants and banks, which are constantly using all the credit they can get to supply their extravagant desires. Over-living, over-trading, over-importing are the consequences. Then comes the settlement, when all who are solvent must pay in gold. The country is drained of its commercial high blood. Weak banks, weak merchants break. The others are warned, and



for a short time business is conducted in a more prudent manner. It is only for a short time. The desires of vanity and ambition are insatiable. It is no matter whether the currency of the country is gold or paper; whether there are banks or no banks—the same financial disasters recur at intervals of short periods, and will probably continue to recur while man continues what he is. To the merchant, however, who is driven by his profession to the use of credit, and dependent in some degree on the fluctuations of the money market, it is useful and valuable to study the general principles of finance, and make himself acquainted with the commercial condition of the world.

#### ERIE RAILROAD AND THE OTHER SIDE.

We find the following in the *American Railway Times*, published in Boston:

**THE OTHER SIDE.**—We last week copied from the Cincinnati *Railroad Record* a paragraph sharply criticising the present management of the New York and Erie road, and stating that the new President, Mr. Moran, has dishonored "free passes" previously given. To this Mr. Sumner, the New England General Agent of the Company, has sent us a reply in which he says:

"The statement is incorrect in many particulars. Mr. Moran has in no cases dishonored passes given out previous to his appointment to the Presidency, and people use them when they have occasion to go over the Road. Immediately after the installation of Mr. Moran as President, the Board of Directors by a unanimous vote instructed him to issue no more passes over the road, which measure he felt bound to comply with and which he has conscientiously carried out."

Of Mr. Moran's remarkable salary, for which we never blamed him, though we have already given the why and wherefore of it, such as they are, we willingly allow Mr. Sumner to give his explanation. He says:

"In regard to the high sounding caption of Twenty-Five Thousand Dollars salary, the true case is this. Mr. Moran was earnestly solicited by the board to accept the office of President when he was quietly pursuing his business in Europe. His was a position lucrative and commanding, and it was not until letter after had reached him that he would in any way consent to abandon his own business for that of President of the Erie Railroad. That he took the office to secure the Bondholders in Europe, as many papers have stated, is a wholly unjustifiable assertion; he being called into office mainly by the Board of Directors, who felt themselves justified in paying Mr. Moran a salary equivalent to the ability and means he had at his command to make reforms; and bring up the road to a standing that gentlemen who have invested their money in its stock, have a right to expect."

When Mr. Sumner or any other gentleman connected with the great experimental road, undertakes the *experiment* of convicting us of falsehood, he should be better posted of the facts in the case, or he may find himself a self-convicted falsifier. The simple fact in regard to the dishonoring of free passes is, that a gentleman of this city, hav-

ing a free pass, was compelled by at least two conductors on the Erie road, to pay his fare or leave the train. The conductors declared they were acting in obedience to instructions, and that they had no alternative, however unpleasant the duty. Under these circumstances, it will take more than the simple dictum of Mr. Sumner to controvert the fact that the Erie Railroad did dishonor a pass already issued. And this, we say, is an experiment never before tried.

The gentleman to whom we refer is at the head of a largely circulated and influential periodical published in this city, and has been a constant friend to the Erie Railroad. The road is indebted to him for many an item of business that would otherwise have sought another channel.

Mr. Sumner is the "New England General Agent of the Company," and is as likely to know the facts of the case, as we are to know the Court secrets of Louis Napoleon. His charge of *incorrectness* in our statement, is therefore a simple piece of impudence and ignorance.

With regard to Mr. Moran's salary, we do not blame Mr. Moran for taking as large a salary as the directors will give him. But a salary much larger than that now given, might not have made it wise in him to take the position he now occupies. Mr. Moran, as we understand it, is an admirable financier, but we have nowhere seen it claimed for him that he has had any experience in the practical construction or management of railroads. When, therefore, we see it stated that "the Board of Directors felt themselves justified in paying Mr. Moran a salary equivalent to the ability and means he had at his command to make reforms, and bring up the road to a standing that gentlemen who have invested their money in its stock, have a right to expect," we feel like saying tudge. It is all nonsense. Mr. Moran was not put there with the expectation that he would make reforms in the operation of the road. The best that was expected of him was that his position as a man of wealth, and his ability as an "operator," would give a turn to the betting on the stock of this road in the stock Board in New York, which would enable "the gentlemen who have invested their money in it" at the low figures at which it has sold of late, to realize a considerable advance. It was a great experiment in the management of this road, an experiment involving the value of nearly forty millions of property. And it remains yet to be seen how it will succeed. We asserted in our previous article, and still believe that many a man could be found at a salary one-tenth as large as Mr. Moran is now getting, better fitted for the duties of President and Superintendent of a railroad, than any simple financier or merchant, however much he may be able to

realize out of his own business. And we assert moreover, that if Mr. Moran fails to bring up the value of the stock in Wall street, the period of time which he will enjoy his enormous salary will be a very limited one.

#### RAILROAD PAPERS.

We insert the following remarks on Railroad papers from our cotemporary of Philadelphia, the *United States Railroad and Mining Register*. And would add that the Railroad weeklies should be found not only on the tables of Railroad Offices but in the hands of all the Directors and most of the stockholders of our Railroads. We can account for the stockholders dereliction of duty on no other supposition than that they are ignorant of the positions of the roads in which they are interested or of the privileges to which they are entitled. If they were regular readers of any one of the Railroad papers they would soon learn their privileges and duties and the result would be highly beneficial to the general railroad interest.

**THE RAILROAD WEEKLIES.**—In the Offices of railroad companies, and in the counting houses of manufacturers of railroad machinery, also in public libraries and elsewhere, it is not an uncommon sight to see on file, as many as four of the different periodicals devoted to railroad interests, published in Boston, New York, Philadelphia and Cincinnati. Except New York (where there are two) there is in each of the cities named, but one special (not exclusive) railroad publication; so that, for about the sum of ten dollar a year, four weekly publications emanating from four principal cities are regularly received, read or cursorily looked into, and carefully filed for reference.

These four papers, edited at four important geographical points, by persons of dissimilar tastes and *fortes*, with selections extracted from exchanges fresh from all the States of the Union and parts of Europe, present such a diversity of matter derived from so many sources of intelligence of current events, that nothing short of a glance into each will satisfy the reader who makes it his custom to *post himself* in railroad literature; for in some one of the four publications—*constituting a compendious system of railroad registration*—his eye is ever sure to fall upon an article, that, if his reading were restricted to a single publication, might not have passed under his observation; and as to many readers, a single thought, prompted by an idea embodied in a paragraph, essay, or statement, in some of these four papers, is worth in elaborated results an hundred fold more than the joint subscription price, they possess a *suggestive* value against which to the reader their cost weighs as nothing.

Opinions on finance, trade and mechanics, shown in the railroad mind of the country, often take root and spring up in improvements and reforms; and comments rained down on current topics and events, keep attention and duty awake and alert to avert error and embrace opportunity. Railroad Officials of all responsible grades must make intellectual weekly trips in the railroad Press to keep up with these eventful railroad times; not necessarily relying on the columns of any one paper for safe conveyance and instructive



travel, but, if the mental tourists be large-hearted and broad-minded, on about four papers; there are four cardinal points in the compass, four driving wheels to a locomotive, and "four winds of heaven;" perhaps there should be four special and technical newspapers in the Office of every railroad corporation.

#### PACIFIC TRAVEL.

The public ear has again been startled by the announcement of one of those tremendous accidents which spread gloom over a nation. The Pacific Mail Steamship Central America left Havana on Sept. 8, having on board about 550 passengers, and a crew of about 70 persons—making, in all, over 600 human beings. The vessel encountered a severe storm shortly after leaving port, sprung a leak, and on Saturday night foundered at sea. The females and children, with a few of the crew, had been placed on board the brig Marine, which fortunately happened in sight. At the time the vessel sank over 500 human beings were cast out on the waters of a stormy ocean, in a dark night, with no hope but a plank or a life preserver, 200 miles away from land. Of these some forty were picked up by passing vessels, and the balance found a grave, one by one, as they lost the strength to buffet the waves.

The conduct of the lost by this terrible calamity shows them to be men whose loss at any time would be a misfortune—men who could look death in the face, and yet calmly use every exertion that promised the smallest chance of escape.

This horrible accident, on the details of which it is painful to dwell, adds only another argument to the already overwhelming mass of reasons why our government should no longer delay its action on the great question of a Pacific Railroad. Five hundred of our most enterprising citizens lost by one grand calamity, against the repetition of which no future precautions could insure, call loudly for a measure which we have advocated for the past two years as necessary for our national honor and safety, and for the social and commercial interests of our people.

FRANKLIN R. R. PA.—The *Pennsylvanian* says:

"It is now understood that the Franklin Railroad, which recently passed into the hands of Messrs. Worrell, Dull & Jones, is to be completed to Hagerstown with as little delay as possible. The proprietors have made liberal propositions to the people along the line, and there is little doubt the necessary means will be forthcoming. The iron is contracted for, and they ask only sufficient subscriptions by the people to pay for laying it down, say \$60,000, between the two counties of Franklin, Pa., and Washington, Md. We understand they offer stock at 80 cents on the dollar, or \$400 per share of \$500. They promise to run cars from Chambersburg to Greencastle on next Christmas day, if the people of Franklin take without delay stock to the amount of thirty thousand dollars."

## Railroads.

### KENTUCKY CENTRAL R. R.—SECOND DIVISION.

OFFICE OF LEXINGTON & DANVILLE R. R. Co.,  
LEXINGTON, KY., Sept. 8, 1857.

To the Board of Directors:

GENTLEMEN:—I am gratified to be able to announce to you that our road is in running order to Nicholasville—nearly ready to be delivered, according to contract, to the Covington & Lexington Railroad Company, to be operated in partnership. We yet have some depot buildings to put up, a few miles to ballast, station-switches and side tracks to lay down, and engine stalls to erect. These can all be finished during the present month. We can at the same time continue the transportation of freights and passengers to and from Nicholasville.

The Covington Company are now running a passenger train for us, under a temporary arrangement, for half the gross receipts.

All our contractors and laborers have been paid up to the 1st of this month.

Having reached this *temporary resting place* in our progress southward, a brief review of our *past* history, and an accurate statement of our *present* condition, seems to me to be due to the stockholders and the public at large. I shall not attempt to describe either my physical labor or mental anxiety during the last three years, while we have been accomplishing this very important result. I will merely say that my whole time and undivided attention, as well as all my pecuniary resources and credit, have been devoted to the work, and I bear willing testimony to the fact that but for your hearty, self-sacrificing and energetic co-operation and support, the enterprise must have failed for the present—awaiting more auspicious times, and a more liberal spirit in the country, for its successful prosecution.

It is well known that when the road was placed under my charge, in May, 1854, it was hastening, in the footsteps of the Maysville Railroad, to an early *stand still*, and consequent loss of hundreds of thousands of dollars to the stockholders. Fayette county had generously subscribed two hundred thousand dollars in bonds, to which the citizens of Lexington had added fifty thousand dollars in cash. Boyle county had subscribed one hundred and fifty thousand dollars in bonds, to which her citizens had added nearly another hundred thousand dollars in cash; and Jessamine county had subscribed and was promptly paying seventy-five thousand dollars cash, by self-taxation. There was not a dollar in the hands of the Treasurer—every county bond had been disposed of, and nearly all the private stock collected and spent—the company was wholly without credit, and had lost the public confidence. My very first act after taking the oath of office was to sign my name as secu-

rity to a note for money borrowed; and there were other debts of a similar character due to other persons, to a considerable amount.—Most of the money thus obtained had been advanced to defaulting contractors, a large portion of which was never refunded.

While this was our financial condition, all other matters seemed equally unpromising and behind-hand. Not one mile of the road had been fully graded, while expensive work was scattered along the line from Lexington to Danville—each useless to all the rest—and the right of way had been only partially secured. Our depot had been located, and very costly work executed, in graduation and masonry, on the southern edge of the city—while the Maysville and Covington depots were on the north, the Louisville depot on Water street, and that proposed for the Big Sandy on the east—all widely separate from each other, and not an inch of the intervening space had been purchased for the purpose of uniting them.

The suspension bridge across the Kentucky river was under contract to Mr. Roebling, the successful engineer and architect of the Niagara bridge of a similar character. The massive stone towers and anchorage of this great work have since been completed, costing nearly a hundred thousand dollars.

The whole road had been let to two sets of imported contractors. The first *twelve* sections, from Lexington to Nicholasville, to Messrs. King & Miller, under a loose parole contract, or rather under no contract at all; for it has lately appeared that, although *two* contracts had been drawn up—one by the contractors, and another by the Chief Engineer of the company—differing from each other in some important particulars, *neither had been signed*, leaving us not only to foot the bills for work actually done, but an expensive law suit to settle an unadjusted and disputed demand made upon the company by the contractors, when they surrendered back the work.

The remaining *twenty-two* sections, on both sides of the Kentucky river, between Nicholasville and Danville, had been let to Shoup & DeGraff, to whom large advances had been made without security, who neither performed the work nor refunded the money due us, involving us in other expensive and troublesome law suits.

I was fully aware of the hazardous experiment I was about to make when, under these circumstances, I agreed to take my present office; but I thought the enterprise too important to the State at large, and to vital to this community, especially, to be abandoned without another strenuous effort to save it. It is true that few, if any, believed I could succeed in giving new life to such a dead concern. My best friends advised me not to attempt it, urging that "*if I succeeded I would gain no fame, and if I failed would excite no sympathy.*"



But I was neither working for applause nor asking for commiseration. I had an equal disregard for both. I was firmly of opinion, and in this you fully concurred, that if we could only make *one step* forward to the Kentucky river, or even to Nicholasville, we would at once secure sufficient travel and transportation to pay all expenses, as well as the interest on our mortgage bonds. We have already more than demonstrated the truth of this hypothesis. In two weeks we have transported over our road, with a single little locomotive and our construction cars, 18,805 bushels of wheat, and during the present week, I have no doubt, our receipts for passengers alone will average more than \$100 per day.

We should, at the same time, be penetrating deeper and deeper the most beautiful and fertile country on the face of the earth, and lessening the distance which separated the Northern from the Southern system of railroads; until the immense capital of *two hundred millions of dollars*, invested in these works, would find it indispensable to its profitable development to come to our assistance and push us through from both ends. Ours will thus be emphatically the *Isthmus road*—the main connecting link between the Northern Lakes and the Gulf of Mexico—between the great States now spreading with such rapidity over all the waters of the Upper Mississippi and the South Atlantic Ocean—and thus become the most important thoroughfare on the continent. Such an enterprise was worthy of all we have done, or *ever can do*, to carry it through; and I have an abiding confidence that the whole country will soon concur in this high appreciation of it.

By holding the defaulting contractors to strict accountability—dispensing with all unnecessary officers—putting the salaries of the others at barely living rates—and instituting the most rigid economy in all the departments of expenditure, we have gradually won back the public confidence—have obtained over one hundred thousand dollars additional subscriptions of stock, and been enabled to borrow enough money at fair rates to finish the road to Nicholasville and grade it to the Kentucky river, ready for the iron rails. Already the business pressing upon us, and our consequent income, has surpassed our most sanguine expectations, and given high promise of successful and remunerating future operations.

I annex a statement, made out by our acting Treasurer, of our present condition, with some explanatory remarks, to make it perfectly intelligible. I think we can safely challenge investigation, and may not fear a comparison with any similar work now in process of construction. All we need is a little extension of the same confidence and indulgence which has enabled us to do so much, and *we shall have a paying road, free from debt*.

Last winter, when I had made a sale, which

I thought reliable, of our first mortgage bonds, to pay off our personal liabilities and finish our road to the suspension bridge, I desired a friend to purchase the ferries near by, and all the land between the railroad and the river. My object was to secure ample room for a coal and lumber landing, as well as for a roadway and inclined plain up the cliffs. This was accordingly done, with the express understanding that our company might take such part and portion of it as the Board of Directors might think necessary for our future use. It is now offered to you, and your decision is desired. We already own sixteen acres around the towers on this side of the river, but I think we ought, at once, to secure free connections with the ferries and landings below, with such portions of the bottom land as may give us ingress and egress, and the free use of our other possessions. If it shall fall into the hands of speculators unfriendly to us, they may put up the price, and give us much trouble hereafter. I hope the Board will, therefore, consider the matter, and act upon it promptly.

The Kentucky river coal, wood and lumber trade must necessarily concentrate at this place as soon as our road furnishes them facilities of transportation to the rich interior country and towns, needing large supplies, on both sides of the river—to say nothing of the sand, lime, salt, and other articles of prime necessity. The freight upon these local products alone will soon pay the interest upon all our mortgage bonds intended to be issued, and leave a surplus for the stockholders.

I doubt not that private capitalists, ever looking for permanent profitable investments, will soon find out and appreciate this highly advantageous position—fifty miles nearer the coal mines than Frankfort, at the crossing of the Louisville Railroad, and only 22 miles from this city, while it is within 12 miles of Danville, the chief town of Central Kentucky, and only 10 from Harrodsburg. A flourishing village will soon take the place of the woods and cornfields now there, while beautiful country seats will ornament the picturesque hills and cliffs in the vicinity. Our stupendous suspension bridge will at once become the object of curiosity and attraction to citizens and strangers, having the longest single span in the world, and 25 feet higher above the water than that at Niagara.

Having accomplished so much with such poor means up to this time, why should we doubt the future? It is true that there has recently been a panic in the money market, extending itself even to our own safe and solvent institutions; but this will soon pass away. The explosion of one mismanaged concern in a neighboring State, or of a score of *bogus* Wall street stock gamblers, can produce no lasting impression in the face of our unparalleled crops of all descriptions—grass, corn, wheat, potatoes, &c. These form the only true and safe foundations of wealth and happiness in a country, and we can well dispense with all fungus excrescences.

An effort is now being made in Cincinnati, with every prospect of success, largely to augment their stock subscriptions to our road, and the numerous railroads concentrating at that point are considering the policy of soon holding a convention in this city to devise ways and means to push us forward to the Tennessee State line—while the Southern roads will concert measures to meet us at that place. If sustained as we ought to be by our immediate constituents, our final triumph is certain.

You are aware that some of our mortgage

bonds have been placed in the hands of reliable agents in New York and Cincinnati for negotiation. As soon as the present storm subsides and money matters settle down in their accustomed channels, I doubt not that their true value will be understood by capitalists, and that sales will be made for permanent investment to an amount sufficient to relieve us from our personal liabilities, and enable us at once to complete the road to the suspension bridge.

I have retained the remainder of the bonds at home, hoping that our monied men along the line of the road would take them, or that *Fayette* and *Boyle* counties would imitate the wise and liberal policy of the people of *Jessamine*, who have purchased twenty-five for county purposes at 80 cents on the dollar, and taxed themselves to make payment.

Very respectfully,

Your most obedient servant,  
LESLIE COMBS, Pres't.

OFFICE OF LEX. & DAN. R. R. CO.,  
Lexington, Sept. 14, 1857.

GEN. L. COMBS, President:

Dear Sir:—According to your request, I submit the following statement of the cost of the Second Division of the Kentucky Central Railroad, as far as completed:

1st. Lexington to Nicholasville, including the part in the city of Lexington, and the depots and construction train, 12 6-10 miles, cost about \$28,000 per mile.....	\$352,300
2d. Grading, bridging, &c., from Nicholasville to the Kentucky river, including ties, chairs, and spikes, and some iron on hand, right of way and a proportion of engineering, office expenses, discounts and interest.....	227,000
3d. Kentucky suspension bridge, with land attached, and proportion of salaries, discounts, &c.....	120,000
4th. Expended beyond river in graduation, right of way and proportionate amount, as above..	50,300
	\$749,600

These estimates are only a hasty approximation, but I think nearly correct.

W. A. GUNN, R. E.

#### CONDITION OF THE LEXINGTON & DANVILLE RAILROAD COMPANY.

ASSETS.	
242 7 per cent. 1st mortgage bonds, each \$1,000 (only \$300,000 issued).....	\$242,000
63 7 per cent. Covington & Lexington Railroad bonds, each \$500.....	31,500
Stock subscriptions in Kentucky still unpaid; part to be taken in cross-ties, part in suits and unsettled, or on which an extension of time has been given.....	13,589
Judgment against Joel O. Shoup, and now in suit against Thomas Barbee, as security, principal and interest.....	30,536
Account assigned by the Maysville & Lexington Railroad Co., as cash, against the Covington & Lexington Railroad Co., now in suit, principal and interest.....	16,350
Cincinnati subscriptions unpaid, for which we have good notes and acceptances—now on hand \$10,000.....	20,850
Bills receivable, notes and judgments.....	2,875
Cash on hand this day.....	835
	\$358,536

LIABILITIES.	
To John W. Poor, balance due him on cross-ties.....	\$ 1,866
To Vose, Livingston & Co., balance due for iron, to pay which we have sold bonds to Jessamine county.....	10,571
To bills payable for money borrowed by the President and Directors to pay for work done (including \$37,000 of bills drawn on securities now being negotiated in New York).....	83,290
	96,027

Amount of assets over liabilities.....\$262,509

S. N. DRAKE, Sec'y and Treas. pro tem.  
LEXINGTON, Sept. 8, 1857.

LEXINGTON & DANVILLE RAILROAD OFFICE,  
Lexington, Sept. 14, 1857.

At a meeting of the Board of Directors, the foregoing report was presented by the President, ordered to be recorded and published.

Att: S. N. DRAKE, Sec'y pro tem.



# CHICAGO, AMBOY & UPPER MISSISSIPPI R. R.—ENGINEER'S REPORT.

To the Executive Committee of the Chicago  
Amboy & Upper Mississippi R. R. Co.:

GENTLEMEN:—In compliance with your request, a party was organized in the early part of the season, under the direction of J. B. Hawley, Esq., to make a careful survey of the route and an estimate of the cost of your projected railroad from Chicago via Amboy to Cordova, at the head of the rapids on the Mississippi river.

As the object at the time was to ascertain the cost of constructing a road from some central point near Chicago, the survey was commenced at Bridgeport and continued down the south side of the Illinois & Michigan Canal about nine miles; thence crossing the canal and the Desplaines river and continuing in nearly a direct line to the crossing of the Du Page river, below the junction of the east and west branches of that river; thence to Oswego; from Oswego the line crosses Fox river opposite that town, and bears north of west, crossing the Chicago, Burlington & Quincy Railroad between Chicago and Bristol stations; thence passing Somonauk, East and West Pawpaw, and Malugin's, to Amboy.

A second line was run from Oswego, keeping down the south bank of Fox river about four miles, there crossing and passing through Bristol, and crossing the Chicago, Burlington & Quincy Railroad near Plano station, and uniting with the first line at Somonauk; thence on the first line to Amboy.

From Amboy two lines were run to Cordova: one via Lyndon, and the other via Prophetstown—the Lyndon line proving the third of a mile shortest.

Assuming the Illinois Central Station in Chicago as a starting point, and the distance thence to Bridgeport to be four miles, the length of the several lines will be as follows:

Miles.

Chicago, via, Oswego, Amboy and Lyndon, to Cordova.....	143 75-100
Chicago, via, Oswego, Amboy and Prophetstown, to Cordova.....	144 8-100
Chicago, via, Oswego, Bristol, Amboy and Lyndon, to Cordova.....	145 47-100
Chicago, via, Oswego, Bristol, Amboy and Prophetstown, to Cordova.....	145 80-100
Making the line via, Bristol 1 72-100 miles longest.	

The rapid increase in the business and population of Chicago enlarges, in a corresponding ratio, the demand for property along the rivers nearest the lake, for grain and warehouses, forcing the lumber and stone yards, and large manufactories and machine shops, up the north and south branches of the river, so that even now more than two-thirds of the entire front on South Branch is occupied. How business and population have increased for the last five years may be gathered from the figures below, which are deserving great consideration in determining your action as to the earlier or later construction of your road, as well as the necessity of negotiating for station grounds at the commencement of your enterprise.

The receipts of lumber in Chicago in 1852 were 147,000,000; and in 1853 202,000,000; in 1854 224,000,000; in 1855 326,000,000; and in 1856 are 380,000,000 to Oct. 1st, and are likely to reach 450,000,000 of feet for the season.

The shipments of grain by lake in 1852 were 5,500,000; in 1853 6,750,000; in 1854 12,225,000; in 1855 15,750,000; and in 1856 are, to the 1st of October, 14,200,000 bushels, being an increase of upwards of three millions of bushels over the same time last year. The total shipments of grain for the season by lake cannot fall short of 20,000,000 of bushels.

There were received in Chicago during August and September, 1856, upwards of seven millions of bushels of grain, five millions of which came in by railroad, giving employment in those months to 14,285 cars, carrying 250 bushels each, or 11 trains each day for the 52 working days in two months. This traffic was not distributed equally to the nine roads leading into Chicago, but was confined to five of them—the grain lines—of which yours, when constructed, will be the sixth. It should be remembered, too, that at this very time the out freights of lumber on the grain roads were half as large as the in freights, and that the common passenger and freight traffic of the country was as large, if not larger, than at any time prior.

The population of Chicago has increased from 4,470 in 1840 to 38,733 in 1852; to 60,652 in 1853; to 65,872 in 1854; to 83,509 in 1855; and to 100,000 in 1856.

From these facts the conclusion seems to be inevitable that, though the want of railroad facilities on the South Branch near Bridgeport may retard, it will not prevent the entire occupation of this portion of Chicago river in a short time. This want your road may supply, and it will enable you to make favorable arrangements for right of way, station grounds, and for accommodating grain, lumber, stone, and heavy freights; while you may have your passenger business and lighter class of freighting done at a more central point, independently or in connection with some of the present roads. Should the plan be adopted of securing a location on the South Branch, near Bridgeport, from three to three and a half miles will be saved, shortening the distance for heavy freights between Chicago and the Mississippi river to 140 miles.

The original intention was to run a line through Naperville, but circumstances prevented. It is believed, however, that a line that way, measured either by cost or distance, would be as favorable as the present, and besides receive the business of the town, and extend railroad facilities to a flourishing and enterprising place.

The present line from Chicago to Oswego passes through a fertile agricultural country, extensively cultivated, promising to offer as

much traffic to your line as the country along any long railroad route in the State at its commencement; and the same is true of the country all the way to the river, with the exception of some swamp lands between Rock and Mississippi rivers.

Oswego, the county seat of Kendall, is beautifully located on the south bank of Fox river, and is rapidly increasing in wealth and population, having fine water power and a prosperous farming neighborhood, and possesses all the elements necessary to make a large and flourishing manufacturing town.

Fox river is perhaps one of the most reliable streams in the State, and this feature gives additional value to the water power along its banks, falls sufficient for ordinary mill seats occurring every few miles of its course. Should the Bristol line be adopted, another valuable water power would be improved, where the line crosses the river, about four miles south of Oswego, and it would infuse new life into the improvements at Bristol, where two large flouring mills, one with three, and the other with four run of stones, and two saw mills are now in operation, and where a foundation is laid for a large machine shop. The largest and best body of timber on Fox river lies in the vicinity of Bristol, and ties for many miles of road could be procured from it on favorable terms. A gravel bank, hardly inferior to any in the State, is found directly on the line, at the point of crossing Fox river.

Between Bristol and Amboy the line passes through several small settlements, and the entire distance traversed between these points is hardly surpassed in agricultural wealth by any portion of the State. Amboy is a prominent point on the Illinois Central Railroad. Here the company has erected a first class passenger station house, and extensive engine, repair, car and other shops, and the company's trains change engines and trainmen here, and passengers atop for refreshments, and it is made the head-quarters of the Northern Division, or 282 miles of the line. Amboy is growing rapidly, and has now 2,000 inhabitants, and needs but your road to insure it the position of the leading town in the county.

A direct connection between Amboy and Chicago would be of immense advantage to the Illinois Central, and would insure from that company, I have no doubt, every facility, and the most favorable arrangements in the interchange of passengers and freights.

From Amboy to Cordova the line is unusually favorable, the only expensive point being the crossing of Rock river. A few miles east of Cordova some low ground is encountered, which is overflowed by extreme high water—that from the Mississippi, on some occasions, passing over this spot into the valley of Rock river. This low ground continues to the river, a little north of Cordova, enabling your line to approach that place with light grades and



at small expense. Cordova is very favorably situated, and has really a fine location for a largely increased business. The bed of the river is rock, and there is a good depth of water at all times at the base of a natural levee, where it is proposed to make the terminus of the road.

Opposite Cordova, in Iowa, lies Princeton, a beautiful spot and a thriving town, which commands the cream of the trade from the valley of the Wapsipinicon. This valley lies along the river some ten or fifteen miles, and stretches northwesterly across the State, and is one of the best of the many delightfully fertile valleys of Iowa.

They are constructing the Chicago, Iowa & Nebraska Railroad for twenty miles through this valley; thence it crosses to Cedar Rapids. A branch of eight miles over very favorable ground and grade would reach Cordova, so giving your road a connection with the Chicago, Iowa & Nebraska Railroad to Cedar Rapids, and when extended as proposed, with the entire valley to Cedar river. I cannot but repeat that the Wapsipinicon valley is unusually favorable for the construction of a railroad; and, making a connection with the Chicago, Iowa & Nebraska Railroad, its ultimate extension up the Wapsipinicon should be kept steadily in view.

Such an extension would connect at Independence with the Dubuque & Pacific Railroad, and also a projected road starting not far from Independence, and thence going north to the Great Bend of the Minnesota river and St. Paul. These connections, and your own road, could afford a route between Chicago and St. Paul as favorable as any—if not shorter than any other line. Crossing, in Iowa, the Chicago, Iowa & Nebraska Railroad, the Lyons & Iowa Central Railroad and the Dubuque & Pacific Railroad, and forming connections through them with a large portion of the interior, this extension would put your road in better position than any other line constructed to the Mississippi, for commanding a large business from the heart of Iowa.

From Cordova the construction of a road six miles long to Port Byron connects you with the Warsaw, Rockford & Port Byron Railroad. This road is partially built, and extends southeasterly to Port Byron, 122 miles to Warsaw, below the rapids of the Mississippi.

The report of that road makes the distance from Rock Island to Port Byron seventeen miles, and from Port Byron to Cordova six miles—making it twenty-three miles from Rock Island to Cordova.

	Miles.
The distance from Chicago to Rock Island by the Chicago & Rock Island Railroad is.....	182
By your road, from Chicago to Cordova.....	144
Cordova to Rock Island.....	23
	167

Difference in favor of your line..... 16

Almost the entire east and west business

to and from the Warsaw, Rockford & Port Byron Railroad would naturally pass over your road, particularly from that portion of it north of the crossing of the Chicago, Burlington & Quincy Railroad. Your road, in connection with the Rockford & Port Byron Railroad, would command more business to and from the Mississippi valley, between Cordova and Warsaw, than any other road, for the reason that the Warsaw, Rockford & Port Byron connects with more business points in that valley than all others, and from nearly all of these points the two roads make the shortest route to Chicago.

Your road traverses ground unusually favorable for the construction of a railroad; the lines are very direct, and the grades light, and crossings of Fox and Rock rivers are made at points where there is good water power, and where it and the country surrounding is largely improved.

Making a favorable and mutually advantageous connection with the Illinois Central at Amboy, and at your western terminus with a southeastern road 122 miles long, into the heart of the valley of the Mississippi, and it is fair to presume upon another of a hundred miles into Iowa, with a reasonable certainty of similar contracts with other roads as the country is developed, your line must inevitably become one of the most prominent east and west routes for trade and travel, and secure a business that will return a satisfactory per centage on the investment.

Chicago is deeply interested in the construction of this road. It connects her not only with a single point on the Mississippi, but with 122 miles of the richest portion of the Mississippi valley—enabling her merchants to compete more surely for the entire business of that section than any or all other roads. The Chicago, Amboy & Upper Mississippi Railroad is eminently worthy of the countenance and aid of capitalists, merchants and business men of Chicago.

The annexed estimate, made by J. B. Hawley, Esq., assisted by Wm. H. Burrall and K. F. Booth, are considered ample to complete your road and put it in successful operation.

The estimates are made from Bridgeport. No allowance is made for station grounds or right of way, or tracks in Chicago. Should an arrangement be made to connect with some road now in operation, the expense will not be large; but if your road is kept entirely independent of other roads the expense in Chicago will be probably a very large item.

The map showing the different lines run and estimated upon, and the profiles of the road, are herewith presented, and all of which is very respectfully submitted.

SOUTHERN WISCONSIN R. R.—The opening of a new section of 22 miles on this road was celebrated on Sept. 17.

#### CINCINNATI AND CHARLESTON RAILROAD CONNECTION.

The friends of one of the intermediate links in this great line of railroad now building and to be built held a convention at Warm Springs, N. C., on August 27. The following is the Report of the proceedings.

The committee of two delegates from each county to whom it was referred to report business for the action of the convention, beg leave to submit the following report.

Your committee are deeply impressed with the advantages possessed by the French Broad Valley as the line for a Railroad connecting the valley of the Ohio, Kentucky and East Tenn., with the cities on the Atlantic seaboard in North Carolina and South Carolina, over any other proposed connection. And to establish this position, it might be sufficient to refer to the able survey and Report on the route, made under the authority of the Louisville, Charleston and Cincinnati Railroad Company, and the action thereon at the meeting of the Company at Knoxville and Flat Rock, but your Committee are not left to rely alone on testimony so remote, but all are most fully confirmed and enforced by the late able and most conducive Report made to the Cincinnati, Cumberland Gap and Charleston Railroad Company, by their President, and which your committee begs leave here to refer to with a hope that a large number of copies thereof may be procured and extensively circulated along the whole line of country interested in the subject. In this Report reliable statistics are collected and arranged in such formidable array as to leave no doubt on the mind of any unprejudiced man, that in point of distance, cost of construction, and benefits to be conferred, it can have no rival.

Your committee are gratified to learn that the company organized for that purpose, have a confidence that at an early day they can resume work on the Road, and will, in a short time, put the whole Road under contract from Newport, Tenn., to Paint Rock, N. C., which completes the letting of all that part of the Road from Morristown, on the East Tennessee and Virginia Railroad, to the North Carolina State line, and that its construction will not long be delayed. This would enable the Greenville and French Broad Railroad Company to receive their iron at this point at an earlier day than at any other point, and render it peculiarly proper that this should be the point of their Road first put under contract; and your committee are pleased to learn that that company are taking steps to put their Road under contract as soon as that in Tennessee is let, and to progress South and East to meet those Roads in progress in North and South Carolina. This course your Committee conceive must, if persevered in, unmistakably prove successful, and especially, as the State of North Carolina has already made liberal appropriations, which guarantees the completion of her Roads from Beaufort and Wilmington to Asheville on the French Broad, and a confidence is expressed that the State will extend the same assistance to complete this its Northern Section.

Your Committee do not doubt that Charleston, as well as the State of South Carolina, will soon avail themselves of the charter already secured, to enable them to participate in the benefits of this connection with the west by way of Greenville or Spartanburg, or by both.



Your committee are much pleased to learn that there is prospect of constructing a Road to connect to the East Tenn., and Virginia Railroad to Greenville Tenn., or at the mouth of Laurel. This would doubtless act an auxiliary to both of said Roads, as well as accommodate the traveler and greatly benefit the section of country through which it will pass.

Your Committee beg leave to submit the following resolutions:—

*Resolved*, That the people and States interested in the Railroads herein referred to, should spare no pains to push to completion the different links in this great chain of Railroads, and that as a means thereto, Books should be opened and efforts continued to increase the subscriptions until all is accomplished.

*Resolved further*, That the Cincinnati, Cumberland Gap and Charleston Railroad Company be urged to place the remaining section of their Road under contract to the North Carolina line, and that the Greenville and French Broad Railroad Company be enjoined to commence letting their Road to contract for grading as soon as the other is under contract, and that they begin at the Tenn., State line and progress South to the Blue mountain as rapidly as their means and the increased subscriptions will justify, and that no unnecessary time be lost till the whole line is completed.

*Resolved, further*, As a means of facilitating the work and to increase the subscriptions on said Railroads, the respective companies be recommended to receive subscriptions of work in grading the Road in place of cash, when desired by subscribers for stock.

#### AN AIR-LINE ROUTE FROM NEW YORK TO THE GULF OF MEXICO.

A correspondent at New York furnishes us with a communication, says the *Washington Union*, in which he urges the necessity of completing—for many of the links are already made—an air-line railroad from New York to the Gulf of Mexico, there to connect with a line of steamers to Tehuantepec. The point on the Gulf designated by him is Apalachicola, which he thinks can be reached from New York over the proposed road in about twenty-six hours. If the road should be continued to New Orleans, it would place that city within *two days'* travel of Washington. Our correspondent writes:

"The period is not distant when New York will be connected in a direct line with the Gulf of Mexico. The distance to the nearest point at Apalachicola, in Apalachicola bay, is about 750 miles, less than 800, and should be traveled in a day and a few hours more, at the moderate speed of thirty miles per hour.

"This also is the nearest and most direct route to the Gulf of Tehuantepec, as will be readily seen by applying a straight line to the map. With such a road and fast steamers, what is to prevent this latter point from being reached in three days from New York, and Cuba in two days?

"Already railroads are in existence in this direction, through Augusta and Macon, as far as to Albany, Georgia, leaving less than one hundred miles to complete the connection.

"With proper expedition to the conveyances now in operation to Apalachicola, there is nothing to prevent the travel to that place in three days.

"With a direct route by railroad with double track, and such improvements in this mode of

transport as may be looked for in process of time, what is to prevent the transfer and deposition of freight, as well as passengers, all the way through the populous States of New Jersey, Pennsylvania, Maryland, Virginia, North and South Carolina, Georgia and Florida, making, as it were, a grand Mississippi, on which to bear and distribute the great products of these States and other parts of the world."

In remarking upon the above article, we are right glad to see that propositions for a grand direct metropolitan route from New York to the Gulf of Mexico have come, at least, from the quarter whence they are due. The "Correspondent at New York" is right in urging the necessity of completing a direct railroad line to the Gulf from the commercial metropolis of the United States. The idea of a metropolitan road in connection with the Gulf at Pensacola, and with the Mississippi at New Orleans is not a new one, for it was broached some years ago, and the following propositions made in relation to it.

*First*, That the then existing roads from New York to Washington should be made continuous, and have another track added to them.

*Second*, That a "double track" road should be constructed from Washington, in continuation, to Lynchburg, Va; and thence to Salisbury, in North Carolina; to Anderson, in South Carolina; to Atlanta, in Georgia; to Montgomery, in Alabama; and to Pensacola, with a branch to Mobile and New Orleans.

*Third*, That Pensacola would become the great steamer harbor of the Gulf in its connection with Havana, Brazil, and the Isthmian and trans-Pacific transits at Panama, Nicaragua and Tehuantepec,

And *fourth*, That these communications by rail and steam lines thus established would induce passengers, bullion and correspondence to and from the Pacific and intermediate States and Europe to seek them for comfort, safety, certainty and celerity of transit; whilst freights to and from Pensacola and the interior as well as sea-ward would contribute to make these great lines the most profitable ones in the world—to say nothing of the aggrandizement of Pensacola as one of the centres of operations on the Gulf, and of New York as the other on the Atlantic. But, brief few years ago, the scheme was deemed too gigantic to be entertained. In these few years, however, great strides have been made toward its accomplishment. In a few months there will only be lacking a railroad between Washington and Alexandria, to form an unbroken connection of railroad from New York to Montgomery, Ala., through the Valley of Virginia. This line will show a less zig-zag course than the one now existing by the way of Richmond, Wilmington, Manchester, Augusta and Atlanta. Intermediate lines are being made and links filled up, that will in less than three years exhibit a grand arterial line from New York to Montgomery and Pensacola, through Washington, Alexandria, Richmond, Danville, Charlotte, Greenville, Anderson, Atlanta, and Montgomery to Pensacola; with branches to some point on the Alabama or Texas river, connecting thence with Mobile and New Orleans by fast running *light draught* steamers.

"A correspondent at New York" is mistaken as to the distance between New York and Apalachicola. Some years ago the length of an arc of a great circle extending from New York to Mobile was ascertained in the U. S. Coast Survey Office to be 1030 miles. A similar arc measured between New

York and Apalachicola would be 964 miles; and between New York and Pensacola 1005 miles. Allowing 170 miles for deviations from an air-line that cannot be avoided, we shall have for the most direct road that can now be built, from New York to Mobile, 1200 miles in length; to Apalachicola 1134 miles in length; and to Pensacola 1180 miles in length. By this showing, Apalachicola certainly has the advantage on the score of distance from New York over Pensacola and Mobile; but then St. Marks would have the advantage of her, for that city is nearer to New York by 40 miles, whilst the harbors of Cedar Keys, of St. Josephs, of St. Andrews and Apalachicola lie at nearly the same distances from New York. So that Apalachicola would have rivals about her, in claiming to be the railroad and steamer entrepot of the Gulf; which rival claims would, probably, be settled to her disadvantage, seeing that all the first named harbors have deeper water on their bars than Apalachicola has. It being ascertained that at the lowest tides in winter there are *eight* feet of water at Cedar Keys, *eight* feet at St. Marks, *eighteen* feet at St. Josephs, and *sixteen* feet at St. Andrews. But, admitting that Apalachicola possessed the necessary advantages for an entrepot, there is a fatal impediment to her direct connection with the Georgian railroads. The admirable policy dictated by those devoted to the best interests of Florida, and now inflexibly maintained by them under the authority of law, forbids any Georgian, or other roads, coming into the limits of the State at a point farther west than Hamilton county. An air line is thus placed out of the question; so that if Apalachicola is permitted at all to communicate with a Georgian road leading toward New York, she must place herself in connection with the grand Central Road of Florida at Quincy, on the *opposite side* of the river, and following that road *through Tallahassee* to Hamilton county, strike off on some hypothetical road toward Brunswick, or Savannah, or Charleston, seeking out a connection with New York that is now denied her by the Yulean policy presently prevailing in our State.

CHICAGO, IOWA, & NEBRASKA R. R.—The Chicago Press says:

"The balance of the iron to complete the Chicago, Iowa and Nebraska Railway to Wapsapinicon, thirty-three miles west of the Mississippi, leaves for its destination by the Galena Air Line this morning. Only three miles of the iron remain to be put down, and the energetic engineer, Milo Smith, Esq., assures us he will have it ready for the cars on Saturday night. Next week a line of stages will be put on to run in connection with the roads to Cedar Rapids and all points west and northwest. By this route, passengers will leave Cedar Rapids at 5 o'clock in the morning, and arrive in this city the same evening. The mail to Cedar Rapids and central Iowa will also be carried by this route.

The road is to be completed to London, forty miles west of the Mississippi, by the first of November; It is already doing a large business and is found to be of great advantage to the people living along the line. It will also add very materially to the business of the Galena Air Line and to the trade of our city. Its energetic managers deserve great praise for pushing forward this important work with so much energy and success.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds.	Name of Company.	Quot' of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1800	1st mortgage.		Al'x'ndria, Lon. & Hamp'sr		173	5,000,000.00				
498,800	6			1862-3	2d "		Androsco'g'n & Kennebec		54.55	1,400,000.00		209,475.46	170,240.98	none.
199,060	7	July & Jan.			Domestic.		Atlanta and LaGrange...		86.5	1,000,000.00	129,000.00	274,123.74	173,780.74	4 pr. ct. 6m
52,646	0			now	"		B'ng'r, Old T. & Milford...		12.5	135,000.00	52,545.26	39,104.40	8,671.61	15,000 in '53
500,000	7		N. Y.	1860	1st mortgage.		Boston & Worcester...		44 5-8	4,500,000.00	500,000.00	1,105,781.90	437,062.03	10000 4.5m
500,000	7			1863	Income.		Buffalo & State Line...			1,300,000.00				5 pr. ct. 6m.
300,000	7			1857-9-62	4th mortgage.		Central Ohio...							
200,000	7			1864	2d "		Champl'n & St. Law'rnce		43	1,872,800.00	1,001,087.60	167,200.00	77,700.00	70 per ct.
577,187	6			1872	Domestic.		Ch'r'l'te & South Carolina.		110	1,750,000.00	380,000.00	291,219.56	47 per ct.	\$72,300
192,300	7			1874	1st mortgage.		Ch'go, Burl'ng'n & Quincy.		138	3,746,900.00	3,114,000.00	1,095,185.60	571,725.23	15 pr. ct. 6m
380,800	7			4-7	2d "		"							
1,440,000	6-7-8		N. Y.	8-9	Convertible.		Chicago, Fulton & Iowa.							
1,300,000	8			8-76	1st mortgage.		Cin. Wil'ng'n & Zanes'ville		132	1,761,149.16	2,241,500.00	221,491.96		
374,000					3d "		"							
1,300,000					Income.		"							
532,000					Convertible.		Cleveland Col. & Cin.		139	4,741,220		1 3,754	700,204	6 per cent.
104,000				1873	1st mortgage.		Cleveland & Mahoning...		85	1,500,000.00				
305,500				1864	2d "		"							
540,000	6						Cumberland Valley...		52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
43,000	7			1873	1st mortgage.		Dayton & Cin. short line.		52	1,000,000.00	1,000,000.00			
490,000				1857-8-9			Eastern Railroad...		936-10	3,245,200.00		665,578.79	282,077.84	\$234,133
000,000	7				1st mortgage.		East Ten. & Virginia...		130	625,450.00		30,897.50	19,692.30	
500,000	6				2d "		Essex Railroad...		20	700,000.00				
350,000	7			1860	1st "		Evansville & Crawf'd'vle		109	2,238,657.50		243,970.42	136,061.90	\$133,921.45
740,000	10			1861	2d "		The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,537.81	3 per cent.
88,000	7			1864	1st mortgage.		Fox River Valley...		33	800,000.00				
400,000	10						Fair Haven Branch...		15	300,000.00		50,321.33	14,822.45	\$166,240.00
200,000					1st mortgage.		Georgia RR & Banking Co.		233	4,156,000.00		1,068,202.54	357,689.42	\$166,240.00
100,000	6				1st "		G't Falls & Conway I. R.		20			27,376.69	14,207.07	
100,000	6			1858	1st "		G't West'n R.R. of Can.		281 1/2	4,191,550.00		2,068,836.00		8 pr. ct.
300,000	6 1-9			1869-70	1st "		Houston & Railroad...		74	2,000,000.00		339,196.50	176,329.98	
4,000,000	7			1860	2d "		Hudson River...		144	4,000,000.00		1,924,382.44	718,037.40	
2,000,000	7			1875	3d mortgage.		"		144	4,000,000.00				
1,812,000	7			1875	1st "		Illinois Central R. R.		704	18,453,376.00		1,476,035.27	1031499.68	7 pr. ct.
12,885,000	7			1875	Freeland.		"		704	3,558,376.00				3 pr. ct.
4,115,000	6			1860	1st mortgage.		Indiana Central...		72 4			254,871.00		
3,000,000	7	Nov. 1.		1860	2d "		"							
600,000	7	Jan. & July 1		1860	1st "		Iron R. R.		13	123,700.00				
700,000	7			1860	1st mortgage.		Kentucky Cen. 2d Div.			719,500.00				
50,000	7						Knoxville & Kentucky...							
700,000	7						Laurens (S. C.) R. R.		32	166,000.00		23,233.59	14,233.59	
							Louisville & Nashville...		184					
218,000	7				1st "		Lowell & Lawrence		12 3/5	300,000.00		50,234.71	14,149.13	\$8,000
1,000,000	7			1866	2d "		Mad River & Lake Erie...			2,697,090.00		587,236.57	162,277.50	10 pr. ct.
1,000,000	7			1875	3d "		"			2,697,090.00				
2,000,000	6				1st "		Manchester & Lawrence.		26	1,000,000.00				\$24,000
2,500,000	7			1868	1st "		Marietta & Cincinnati...							
2,000,000	7 and 8			1874	2d "		"							
60,000				1867	1st "		Mexican Gulf R. R.		27					
420,000	8				1st mortgage.		Milwaukee & Horicon...		30					
320,000	8			1881	1st "		Mineral Point R. R.		32					
320,000	8			1868	2d "		"		32					
6,000,000	6			1884	1st "		Mobile & Ohio...		497	10,000,000.00		233,498.98	162,802.24	
500,000	7			1869	1st mortgage.		Nashua & Lowell R. R.		15	600,000.00		193,752.42	55,501.74	7 pr. ct.
2,356,000	7	May & Nov.	N. York				New Haven & North'm'tn		55	922,500.00				2 pr. ct. 6m
8,892,600	6	June & Dec.	N. York				New York Central...		555	23,067,400	14,763,897	7,707,348	3,609,481	3 pr. ct. 6m
3,000,000	7			1864	Con. till 1859.		"							
936,000	7			1864	2d "		N. Y. & Harlem R. R.		133	5,717,100.00		1,040,593.26	64,678.71	\$37,692.30
411,700	6			1864	1st "		"							
500,000	7			1863	1st "		N. Y. Prov. & Boston...		50	1,58,000.00		245,713.00	51,544.40	
300,000	0				2d "		N. Lon. William'tu & Pal.		66	1,700,000.00		120,571.50		\$25,000
							"							
1,500,000	6						Pontchartrain R. R.		5	500,000.00				
1,000,000	6			1873	1st mortgage.		N. O. Opelo's & G't West.			6,000,000.00		116,795.00	366,118.80	7 pr. ct.
2,000,000	6			1873	2d "		N. Y. & New Haven...		62 1/2	3,000,000.00		1,007,666.48		
1,500,000	7			1885	3d "		North Western Va. R. R.		103 1/2					
3,000,000	7			1859	1st mortgage.		"							7 pr. ct.
419,300	5						Northern (N. Y.) R. R.		118	2,000,000.00		600,000.00		
221,800	6			1877			North Missouri R. R.		19 1/2			25,176.74	88,458.56	2 1/2 pr. ct.
				1860			Norwich & Worcester RR		60	2,111,500.00		304,236.33		
							"							
400,000	6						Ogd'sb'g, Clay'th & Rome		94			289,690.10	137,875.93	5 pr. ct.
1,200,000	6			1866	1st mortgage.		Ontario, Simcoe & Huron		88 3/4	2,957,500.00		276,539.02		
300,000	7			1875	2d mortgage.		Orange & Alexandria R.R.							
300,000	8			1868	1st mortgage.		"							
				1872	1st "		Peoria & Bureau Val. R. R.		47	1,500,000.00				6 pr. ct.
250,000	6						"							
800,000	7			1861	1st mortgage.		Philadelphia & Trenton.		28 1-5	1,000,000.00				
1,260,000	6			1864 to 1874	1st "		Portsmouth & Concord.		47					
				20 years.			Potsdam & Watertown...		76	2,000,000.00				
					1st mortgage.		Rutland & Washington...		62 1/2	950,000.00		68,525.42		
							St. Louis & Iron Moun. R.R.		86	6,000,000.00				
					1st mortgage.		Salem & St. Louis R. R.		168 1/2	400,000.00				
500,000	6				1st "		Snd'sky, Mansf'd & Newk		116				19,050.64	
250,000	6				2d "		Sullivan Railroad...		26	500,000.00		75,246.06	17,378.08	
							"							
317,000					1st mortgage.		Tennessee & Alabama...		145			39,586.44		11m. 12 pr. ct.
300,000				1861	1st mortgage.		Terre Haute & Richmond		73	1,294,450.00				
195,000				1840	2d "		Toledo, Wabash & Western		212					
262,300				1875	3d "		Troy & Boston...			1,000,000.00				
							"							
2,500,000					1st, 2d, 3d "		Vicksburg & Jackson...		46				165,076.04	
596,000	7						Virginia & Tennessee...		215	3,000,000.00		322,048.60		2 pr. ct.
200,000	7				1st mortgage.		Westchester (Pa.) R. R.		31	165,000.00				
					2d "		Wilmington & Manchester		171					
							"							
							Winchester & Potomac...		32					
							Worcester & Nashua...		45 63					



## LONDON QUOTATIONS

OF

## AMERICAN STOCKS AND BONDS.

July 31st, 1857.

Belvidere, Del., guar. 1st mort., conv. ....	@	88
Chicago & Rock Island, Mort., conv. 1858, ..	"	—
Cin. Ham & Dayton, 2d mort., ..	"	80
Detroit & Milwaukee, 1st mort., conv. till 1865, ..	"	60
Erie, 3d Mortgage, 1853, ..	"	64
" Sinking Fund, ..	"	78
" conv. 1862 ..	"	73
Grand Trunk (Canada) Debenture, ..	"	62
Great Western " conv., ..	"	67
" " non-conv., ..	"	87
Illinois Central, 1st Mort., 7's, ..	"	107
" " with option 70 per cent. shares till Jan, 1858, ..	"	109
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., ..	"	113
Little Miami 1st Mort. not conv. 6's, ..	"	87
Marietta and Cincinnati, 1st Mort., ..	"	84
Michigan Central, conv., 8's, 1860, ..	"	91
do do do 1869, ..	"	90
N.York Central. No Mort. Not conv., 6's 80	"	91½
" " conv., 7's, ..	"	82
Ohio and Mississippi, 1st Mort., ..	"	89
Ohio and Pennsylvania, Income 1872, ..	"	91
Panama. No mort. conv. 1860, ..	"	65
Pennsylvania, 1st Mort., conv., ..	"	68
" " Sterling, 2d Mort., ..	"	86
Steuenville and Ind., 2d Mort., ..	"	88
" " ..	"	90
" " ..	"	95

The quotations given are sterling quotations. The American values is to be obtained by adding on exchange generally about 10 per cent

## MONETARY AND COMMERCIAL

The financial week just passed has been marked by no serious changes. The Ohio Life Insurance & Trust Co. have made no statement yet of the actual condition of their New York office. This, under the circumstances, is an inexcusable negligence. The stockholders and depositors, and, we may add, the public at large, have a right to be informed, in general terms, what its liabilities and its assets are; and it is the duty of the officers of the bank to make this statement at the earliest possible moment.

The Citizens' Bank and the Central Bank remain closed. Their proprietors are making every effort to meet their liabilities.

Western banks and merchants stand the shock well, and are probably less pressed than most of the Eastern banks, whose notes have formed three-fourths of the circulation of the United States. The bills of these banks are returning upon them now, and they are compelled to redeem their whole circulation. The consequence is the suspension of all that can be forced to suspend, and the withdrawal of currency. We insert the following list of discredited banks from Lord's Detector:

America Bank, Trenton, N. J.  
Agricultural Bank, Tenn.  
Bank of Kanawha, Va.  
Bergen County Bank, N. J.  
Bank of Tecumseh, Mich.  
Bank of Orleans, N. Y.  
Bank of New Jersey, New Brunswick, N. J.  
Bank of South County, R. I.  
Bank of Kent, R. I.  
Bank of Halliwell, Me.  
Bank of America, Tenn.  
Bank of West Tennessee, Tenn.  
Bank of Paris, Tenn.  
Bank of the Capitol, Ind.  
Bank of Corning, N. Y.  
Chemung County Bank, N. Y.  
Chemung Canal Bank, N. Y.  
City Bank, N. J.  
Cumberland Savings Institute, Md.  
Commercial Bank, Columbia, S. C.  
Citizens' Bank, Tenn.  
Central Bank, Ind.  
Colchester Bank, Conn.  
Danby Bank, Vt.  
Dayton Bank, O.  
Farmers' Bank, Wickford, R. I.  
Farmers' Bank, Saratoga county, N. Y.  
Farmers' & Merchants' Bank, Kent county, Md.  
Farmers' & Merchants' Bank, Md.  
Hancock Bank, Ellsworth, Me.  
Hollister Bank, N. Y.  
Huguenot Bank, N. Y.  
Hopkinton Bank, Westerly, Rhode Island.  
Island City Bank, New York city.  
International Bank, Buffalo, N. Y.  
Mount Vernon Bank, R. I.  
Monsun River Bank, Me.  
Macomb County Bank, Mich.  
Mechanics' Banking Association, New York city.  
Morgan Bank, Ga.  
Miami Valley Bank, Ohio.  
N. Y. Security Bank, N. Y.  
Niagara River Bank, N. Y.

Ohio Life Ins. & Trust Co., O.  
Ontario Bank, Utica, N. Y.  
Oliver Lee & Co.'s Bank, N. Y.  
Ocoee Bank, Tenn.  
Ontario County Bank, Phelps, N. Y.  
Rhode Island Central Bank, R. I.  
Reciprocity Bank, N. Y.  
Sackett's Harbor Bank, N. Y.  
Sanford Bank, Me.  
Tiverton Bank, R. I.  
Union Bank, Frenchtown, N. J.  
Unadilla Bank, N. Y.  
Warwick Bank, R. I.  
Warren County Bank, Pa.  
Woolster Bank, Conn.  
Yates County Bank, Penn Yan, N. Y.

At New York we notice a continuance of the state of affairs noted in our last. The banks are compelled to move with caution. The same applies to Baltimore and Boston. At Philadelphia things look squally.

Stocks bring just what their owners are compelled to take for them.

The New York Times of Sept. 22 says:

The week opens, financially, under a less favorable confidence than the condition of the banking movement here, and the accounts from Europe of a continued good market for cotton and grain, might have justified. The depression is to be ascribed to the rebound from other cities. The letters from Philadelphia and Boston this morning were quite blue, particularly from the former, where, on Saturday afternoon, the suspension of the old domestic goods houses of Hacker, Lee & Co. and John Farnham & Co. were announced. The jobbing firms of Deal, Milligan & Co. and T. P. Remington also stopped payment; and a house in the California trade, Newhouse & Spatz, also stopped. There were no new names reported from Boston, of importance, although the letters represent the pressure for money as extreme. The Taunton Machine Works, W. Mason manager, are reported in trouble. Here the failures of the day are not large. Messrs. Cyrus W. Field & Co., paper commission firm, suspended payment. The senior partner, who is the principal in the concern, is now in London, engaged in the affairs of the Submarine Telegraph. One or two other firms are named, but with moderate liabilities. It is hoped that Mr. Field's suspension will prove temporary, as it will no doubt be wholly unexpected to himself.

We annex the remarks of Hewson & Holmes on the Cincinnati markets:

The financial storm which has been raging about us, and indeed over the greater portion of the whole country, had so unsettled money matters that we deemed it of no use to offer stocks for sale until within the past week. For this reason our regular weekly circulars have been omitted since the 2d inst. We now resume their publication.

Our list of sales will exhibit a large falling off from prices thirty days since, but the difference is far less than in New York, and we look for an equally large advance in the next 60 or 90 days, on such of our Western roads as possess intrinsic value.

Money matters are easier; first class short paper is selling at 1 to 1½ per cent. per month. Names not fully up to this standard from 2 to 3 per cent. per month.

Exchange on New York is scarce, and held firmly at 2 per cent. prem.

SALES AT THE NEW YORK STOCK BOARD—Sept. 19.

\$27,000 Missouri State 6's, ..	70½
3,000 California State 7's, 1875, ..	56
2,000 North Carolina State 6's, ..	92
4,000 N. Y. Central 6's, ..	80
1,000 Erie R. C. Bonds, '71, ..	39
1,000 Hudson Riv. 2d Mortgage Bonds, ..	78½
1,000 Harlem R. R. 1st mort. Bonds, ..	69
1,000 Illinois Central R. R. Bonds, ..	85
42 shares New York Central, ..	69½
100 " Del. & H. C. Company, ..	107
65 " Penn. Coal Co., ..	71
100 " Mich. S. & N. Ind., ..	19½
10 " Panama, ..	82
50 " Mich. Cent., ..	57
200 " Erie, ..	17½
100 " Hudson River, ..	17½
100 " Reading, ..	45½
20 " Third-av. R. R., ..	80
10 " Illinois Central, ..	92
100 " Cleveland & Pittsburg, ..	16
25 " Clev., Col. & Cin., ..	80

50 " Galena & Chicago, ..	72
650 " Cleveland & Toledo, ..	36½
250 " Chicago & Rock Island, ..	72
20 " Milwaukee & Miss., ..	36½
100 " LaCrosse & Milwaukee, ..	13

CINCINNATI & FT. WAYNE R. R.—This company have issued a report on their road and prospects, from which we design to give copious extracts. The company have spent in all, up to the present time, \$255,282 72. The length of the road from Fort Wayne to Hamilton is 124½ miles, and from Fort Wayne to Cincinnati, 149 miles. They propose to make a loan of \$2,300,000, and ask the attention of the public and of monied men to their project.

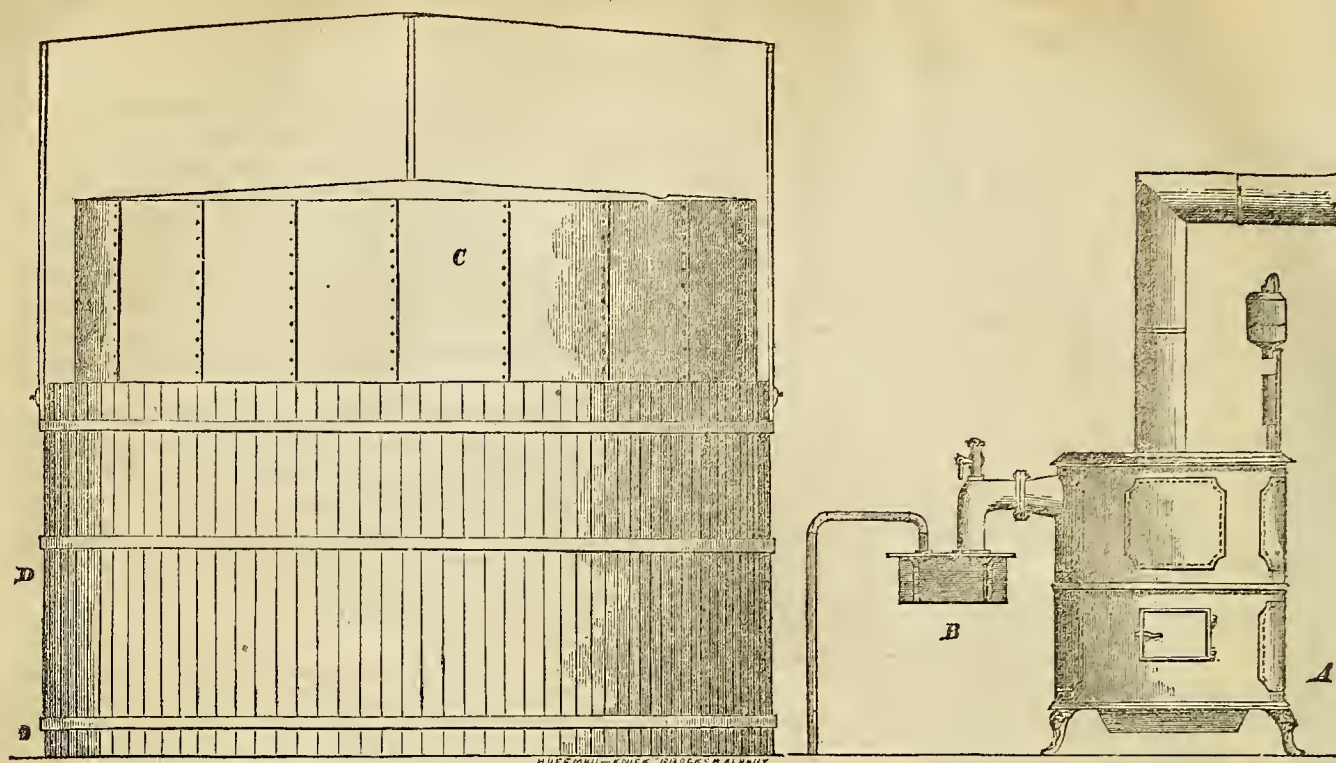
We know of no more important project, either as a local or a trunk line, than this road. It forms one branch of the great line destined soon to stretch from Mackinaw to Pensacola, Savannah and Charleston, and its completion will add another to the great links in this important central axial line of the Union.

RAILROAD ACCIDENT.—As the mail train on the C. & C. Railroad was proceeding south, on Thursday evening last, it came in collision with a tree which had blown across the track, about two miles this side of Iberia station. The engine, together with the baggage and express cars were thrown from the track. None of the passengers were injured. The fireman had his collar bone broken, but he is not considered dangerously injured.

LATER.—Since writing the above, we understand that a farmer living in the vicinity where the accident occurred attempted to remove the obstruction, besides sending his son, a youth of twelve summers, with a lantern some half a mile up the track to warn the approaching train of the danger. The boy becoming frightened, lest the train should run over him, mounted a high bluff, where he swung the light in good earnest. The engineer observing this, and thinking it proceeded from a farm house, paid no attention to it. The train at the time it struck the tree was running at the rate of 20 miles per hour.—*Cleveland Gazette.*

RAILROAD STATION INDICATOR.—This instrument which we noticed a few days ago, has been tried for the first time on a trip through to Prairie du Chien and back on Wednesday and Thursday, and resulted in the complete success of the experiment. At the sound of the alarm bell, passengers looked at the Indicator and at once saw the name of the Station they were about stopping at. None of the Stations were announced by either the Conductors or Brakeman, yet not a single mistake was made. We have no hesitation in saying that the Railroad Station Indicator will become an absolute necessity for all Railroads.—*Milwaukee News.*





#### AUBIN'S PATENT IMPROVED PORTABLE GAS GENERATOR.

This improvement in making gas for lighting depots, churches, colleges, hotels, residences and villages, now on exhibition at the Fair of the Mechanic's Institute, in this city, is the greatest step towards simplification, that has ever been made in the business of gas making. It has the merit of great simplicity in construction and management, and economy in the practical cost of operation. The above cut represents an apparatus suitable for depots, churches and residences. It consists of the stove A for generating the gas, the valve B. for preventing its return into the furnace, and the gas holder C playing in the water tank D. The stove A is about 26 inches in diameter and 3 feet high. It contains a round retort, into which the material of which the gas is to be made is introduced in a sheet-iron charge pan. There is a side chamber to the retort into which water is passed drop by drop, this is converted into highly heated steam, and mixing with the gas, purifies it. The introduction of the steam also keeps the retort free from the deposit of charcoal usual in other gas generators, and which is the main cause of the destruction of the retorts. The cooling of the gas is accomplished in a vessel submerged in the water of the tank, and consequently not shown in the cut.

The process of gas making, as conducted with this apparatus, is very simple. The retort is brought to a red heat and the charge pan is then introduced, the lid, which fits into a groove in the retort filled with a fusible

alloy, is then dropped into its place, making an air-tight joint, the water allowed to drop slowly and the process of generating gas begins at once. The try-cock at the elbow of the pipe running from the retort to the valve shows the gas coming over, and also indicates when the charge is exhausted. When that is exhausted another can be introduced, and so on continuously till the gas holder is filled.

The extreme simplicity of this apparatus will recommend it for general adoption. The cost of the gas as made by it, is as follows:

COST OF ONE THOUSAND FEET OF GAS.	
60 lbs. Rosin.....	\$0.60
1½ bushels Coal at 14c.....	0.17½
Sawdust.....	0.03
	<b>\$0.80½</b>

The one thousand feet of gas generated from Rosin, are equal to two thousand feet of gas generated from Coal, and will burn as long and give as much light. The comparison of cost, then, of this gas with the coal gas of the companies at \$2.50 per thousand, would be—

Rosin Gas, as made in this furnace.....	\$0.80½
Coal Gas equal in light.....	5.00

An arrangement could readily be attached to trains for lighting the cars with gas. The comfort, beauty and economy of this must be apparent at the first suggestion. But were only the depots and hotels lighted by gas, it would be a great step in improvement so much needed by our companies.

☛ The last Cotton crop of the United States, according to the N. Y. Shipping List, was 2,939,519 bales, against 3,527,845 bales the previous year.

#### IRON AND ITS MANUFACTURE.

The Secretary of the Treasury has issued the following circular to the iron manufacturers of our country. We would call the attention of such of our readers as are engaged in iron manufacture to it and trust they will respond. If generally complied with by the iron manufacturers of the country, it will result in bringing together a mass of information about our iron ores and manufactures, which will be highly useful.

TREASURY DEPARTMENT, Aug. 31, 1857.

SIR: This department has been furnished with undoubted evidence that there is a great difference between iron from different mines in the United States in the degree and rapidity with which they become oxydized. Congress, during the last session, appropriated the sum of \$2,500 to test the different irons in this country in that particular. If these experiments shall establish the important fact that we have irons entirely or nearly proof against the corrosion of oxygen, it will multiply the uses of such irons to a considerable extent for purposes to which it is now applied, and give it the preference over other irons for many purposes for which iron is now used.

The very large extent to which this material is superseding the use of wood and stone in the public buildings erecting, at a cost of many millions of dollars annually, under this Department, renders it of the greatest importance to know what irons resist for the longest period the action of the oxygen. It is hoped that the great interest the iron-masters have in the result of this experiment will be considered a sufficient apology for requesting samples of their iron and the ores from which they are made.

I have, therefore, to request that you will forward to this Department, by mail or express, two or three small samples of iron and



a sample of ore from each of the mines worked by you; the samples of iron not to exceed a quarter of a pound each, and the ore not to exceed a half pound in weight. I would also request information on the following points, viz: The extent of the ore deposit; facilities of mining ore; its distance from furnace, and distance of furnace from market, and mode of transportation thence; the fuel used; relative cost of charcoal, coke, crude, bituminous and anthracite iron; kind of flux, and its cost, &c.; the capacity of the establishment and the amount of iron produced during the last year, and what it would be capable of producing under a ready sale and remunerating prices: any peculiarity of the iron produced; whether there are rolling mills in the vicinity, and what descriptions of iron they roll; to what purposes most of the products of your furnaces are applied, and what description of iron the establishment mostly produces; when did your works go first into operation; what has been the annual production, and what the ruling prices each year since your works first started. You will please give the State and county in which your iron mine is situated, and the distance your fuel is transported. As it is the intention of the Department to furnish you with the result of the experiments, you will name the post office to which to address you. If you know of any one in your neighborhood interested in the iron business who does not receive a copy of this letter, if you will forward his address one will be sent to him. You will realize the value of the information when you reflect upon the growing importance of the iron interest of the country—a fact attributable, in no small degree, to the introduction of iron as a substitute for other materials in our public buildings.

The policy of affording encouragement to this great interest, by promoting its production and increasing its consumption, has been commenced by the Government, and I am desirous of obtaining all the information which can be had on the subject, with a view to its further development.

This circular will be addressed to persons not immediately connected with iron establishments, as it is believed that there will be not only a willingness but an anxiety on the part of every one to advance the object which the Department has in view.

I am desirous of obtaining the information asked for at the earliest practical moment.

Very respectfully, your obedient servant,  
HOWELL COBB,  
Secretary of the Treasury.

#### THE HOUSTON AND TEXAS CENTRAL R. R.

The Houston and Texas Central Road was opened to Cypress, twenty-five miles, on the 18th of September last year, and to Hockley, ten miles further, on the 18th of May, 1857. During that time the business has been as follows:

Passengers.....	\$18,613 85
Up freights.....	11,522 62
Down freights.....	7,974 33

Total.....\$38,110 80

Whole number of passengers transported.....14,051  
It will be observed that nearly one-half the business of the road has been the transportation of passengers; and that during the months of June, July and August, two-thirds the revenue has been from this source. It will also be observed, that up freights have been a much greater source of revenue than down freights. This has been owing to the condition of the roads, the greater proportion

of the cotton having been hauled into town on wagons.

The income of the road has fallen some what short of our estimates made in December last, owing to the fact, that the ten miles between Cypress and Hockley, was not put in operation till the 18th of May; and the fifteen miles to Hempstead is yet incomplete. This last, is expected, will be in full operation before the first of November. When complete to Hempstead, it is reasonable to suppose that a vast amount of cotton, hitherto brought on wagons, will come on the cars, and the revenue of the road on down freights, considering this, as well as the increased amount of cotton looked for, may be safely placed, at the lowest, at \$18,000 for the next year. Up freights, likewise, will be transported double the distance, and will amount, in all, probably to \$23,000. The income from passengers will be more than double that of last year. We will, however, estimate it at \$37,000. This will give, as a total income for the year, \$78,000. We believe it will amount to near \$100,000. Though of these things nothing can be known till they are done.

It is hoped by another year from this time, that between 60 and 75 miles of the road will be completed.

#### LAKE SUPERIOR ITEMS.

**COPPER MINING.**—The Cliff had shipped up to August 20, during the present season, 1,216 tons and 1,788 pounds of copper. The North American, to same date, 169 tons 455 pounds, and the Phenix 13 tons 1,587 pounds, making a total shipped from Eagle River during the present season 1,404 tons and 1,830 pounds of copper.

From Eagle Harbor they have shipped up to August 20,

From Copper Falls.....	165 tons 1,649 lbs.
Central.....	35 tons
Connecticut.....	25 tons 24 lbs.

Total from Eagle Harbor.....223 tons 1,673 lbs.  
—Lake Superior Miner, 28th ult.

**IRON MINING.**—The mining companies are pushing their operations forward as fast as possible, but are not able to supply all the vessels at hand, for some days. There have been many delays in hauling the ore, but the receipts show well and will probably not be less from this time forward.

The receipts on the dock, for the week ending August 28th, are per—

Cleveland I. M. Co., gross tons.....	710
Sharon Iron Company.....	680
Total.....	1,390

Shipments during the same time:

Cleveland I. M. Company, per—	
Schr. B. Parsons, gross tons.....	400
Schr. Tartar.....	310
Total.....	710
Sharon Iron Company, per—	
Schr. Wyandotte.....	455

#### MEMPHIS AND CHARLESTON RAILROAD—

**ELECTION OF DIRECTORS**—At the annual election, the following gentlemen received the unanimous vote of the Stockholders of the Western Division, for re-election as Directors for the ensuing year: Saml. Tate, D. B. Turner, S. P. Walker, C. W. Hunt, G. P. Bierne, J. I. Donegan, Wm. Echuls, jr., Wm. Dickson, R. M. Patton.

—INDIANAPOLIS AND CINCINNATI RAILROAD.—The following is the list of directors as elected for this road at the recent meeting of stockholders at Indianapolis: Samuel Wiggins, Geo. T. Stedman, Nat. Wright, H. C. Lord, Cincinnati; L. B. Lewis, Greensburg; T. A. Morris, C. S. Stevenson, Indianapolis; R. H. Manning, New York; Henry C. Lord was re-elected President.

**MICHIGAN CENTRAL RAILROAD.**—The earnings of the Michigan Central Railroad for August, were as follows:

	1856.	1857.
Passengers.....	\$146,626.56	\$126,837.03
Freight.....	112,021.45	138,219.12
Miscellaneous.....	6,801.37	6,294.78
Total.....	\$265,449.38	\$271,350.93
Decrease.....		41,093.45

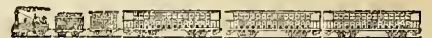
**PITTSBURG, FORT WAYNE AND CHICAGO RAILROAD.**—The earnings of the Pittsburg, Ft. Wayne and Chicago Railroad for the month of August were as follows:

	1856.	1857.	Increase.	Decrease.
Freight.....	79,841 40	57,805 75		22,035 65
Passengers.....	68,349 23	70,219 02	1,869 70	
Mail.....	4,125 76	4,432 29	356 53	
Miscel.....	1,601 34	200 00		1,301 34

Total.....	\$153,917 73	132,707 06	2,226 32	23,436 99
Total dec. 21, 1856, or 16 per cent.				

During the month of August, 1856, navigation on the Ohio was entirely suspended by reason of the unusual low stage of water, and the whole south-west business was thrown upon the road of this Company. For the past month, navigation has been uninterrupted, and boats have been able to carry full freights during the whole month.

#### PERU & INDIANAPOLIS R. R.



Peru, Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the trains from the West, South, and East arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M. for Indianapolis, connecting with all trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T. W. & W. R. R. make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Fr'ght. Ag't.  
Indianapolis, Sept. 16, 1856. [mh29-1y.]

#### To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great Wabash River, in White county, and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for a superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in G. a y ville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.

#### RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
Feb 19-1m 9 South William street, N. Y.



### The Polytechnic College of the State of Pennsylvania.

WEST PENN. SQUARE.

The Polytechnic College, incorporated by the Legislature, 1853, on the plan of the Industrial Colleges of Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to DR. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia.  
Aug. 20—6t

### HOYT'S WATER GAUGE.



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

jy30

### ALLEN & NOYES' METALLIC PACKING.

#### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

### Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by  
GRAY, HEMMINGRAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

### WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building;

### FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

### SAFETY & ECONOMY.

JAMES HARRISON JR.'S

### Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,

dec11 Second avenue, corner of 22d street, N. Y.

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

### RAILWAY AGENTS

AND

### COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

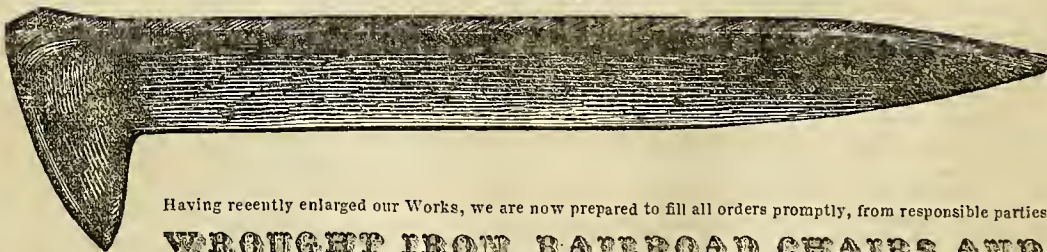
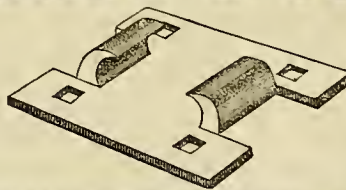
Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

## CINCINNATI WROUGHT-IRON

## RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

### WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an Improved Method. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

4u 20-1y

Works and Office, North side Congress St., East of Canal Bridge.

J. B. GREEN & BRO., Proprietors.



# Most Direct Route to the East. BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and  
Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH  
PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 3½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route. FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177 Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July Office, Adams Express Co., Third street.

# Terre Haute & Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:32 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute & Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1856.

# LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

## THROUGH TICKETS VIA.

WHEELING,  
PITTSBURGH,  
DUNKIRK,  
BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

### TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	5½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

### FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

### FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July

H. B. RUGGLES, Conductor.

# TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omni-bus L

Office No. 2 Burnet House.

Jan2

1856. 1857.

Summer Arrangement.

1857.

# Cincinnati, Hamilton & Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

# NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPOUT,  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

## Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

### BAGGAGE CHECKED THROUGH.

### RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

O. McLAREN, Superintendent.

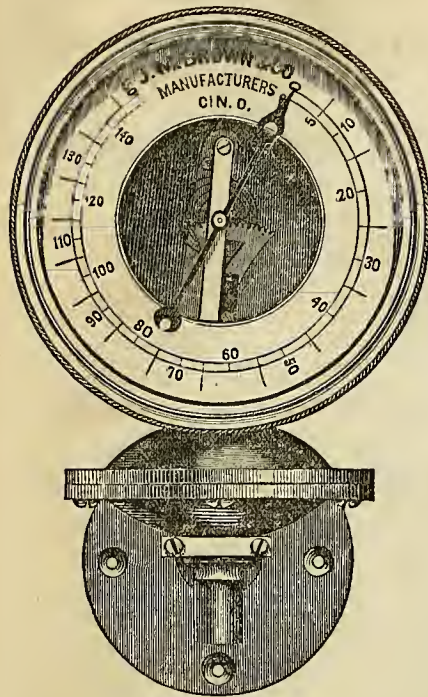
The Omni-buses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front Street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES  
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalbone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafing, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

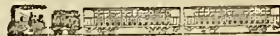
THOMAS PROSSER & SON,  
82 PLATT STREET, New York.



N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.

June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA.

### RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

B. H. GOODMAN & CO.,  
Feb. 7, '66-2m.] No. 7 Wall st., N.

## RAILROAD CAR

AND

### COACH TRIMMINGS.

## DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,  
NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush—  
Printed & Unent do., Entirely New Designs;  
MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars  
ROPE MATTING, Every Width  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Push Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

### PATENT FELT.

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation.  
sop18 DOREMUS & NIXON

W. G. ATKINSON,  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

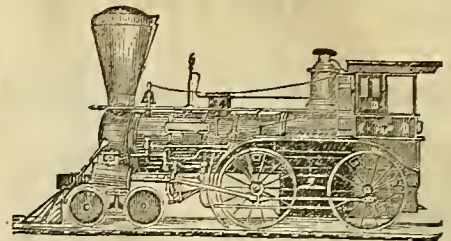
RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological maps prepared.

## Frank T. Foster,

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

### LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width in 124 inches.

### ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for window and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes.  
Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

### Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.

†oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Ties, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, &c. terms. Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

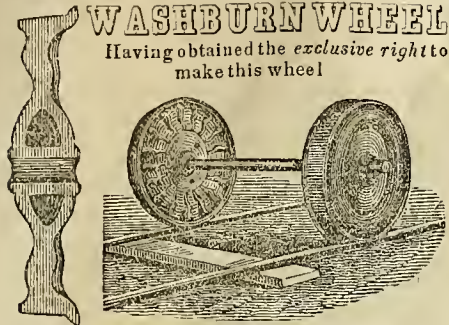
Orders thankfully received and promptly filled at the highest price.

EVER MEAL. (The highest prize) awarded to these pumps at steam Pumping Engine, 111 E. 1st St. Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati.— Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address KECK & HUBBARD,  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

Machinery and Machinists' Tools,  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

### LOCOMOTIVE HEAD-LIGHT,

Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

### Steam and Water Gauges,

Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

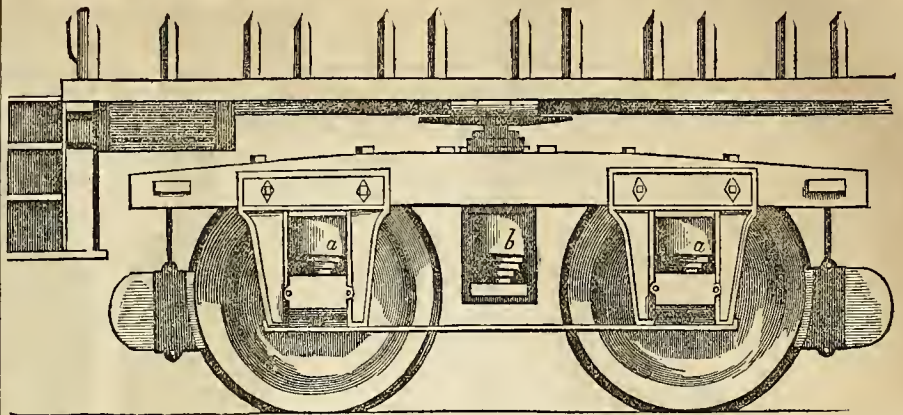
Baggage Barrows and Checks, Freight Trucks,  
**CAR FINDINGS,**

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED. oc23-1y

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT... M. D. WELLMAN... C. M.

## DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 16†\* JOSEPH DAVENPORT.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



### DOUGLASS, SMITH & CO.

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for Passenger Cars of the most superior description,

Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars.

We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

BOLLMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.  
Jan.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars  
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,  
1 n2† NEWARK, N. J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted, connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.  
Robert Harris, Sup't.  
Racine, May 15, 1857. my21

## Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cin- cinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 9 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side. 5 doors north  
Madison House.  
Cincinnati, Jan. 31, 1855. [Jan. 17] Agent.



**CONSULTING ENGINEER.**

The undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park St., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1600 tons do., 57 lbs. per yard, the best American make; all New York and English patterns; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-tf 10 Wall St., near Broadway, New York.

**SILVER, GOLD, LEAD,**

And Other Minerals.

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Odd Fellows' Building,  
mar26 Cor. Third and Walnut streets, Cin'ti, O.

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. Copying.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad. JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in different freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,**

—AND—

Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

POOLE & HUNT,  
Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for  
**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLEYS and HANGERS.  
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, New York City.  
ap8 Or SUMNER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 258 H Street, Washington, D. C. apr12

**Thorough Bed Stock FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL, "TOM HUGHES,"**

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, OCTOBER 1, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.  
Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 32.

#### EDITORIAL.

The Commercial Crisis of the Day.....	509
Erie R. R.—New Loan.....	510
Sunbury & Erie R. R.....	510
Hartford & New Haven R. R.....	510

#### RAILROADS.

Central Ohio R. R.....	511
Erie R. R.....	514
Delaware, Lackawanna & Western R. R.....	518
Batavia & Attica R. R.....	518
Northeastern R. R., N. C.....	518
The Tehuantepec Railroad.....	518
Toledo & Detroit R. R.....	518
Bay de Noquet & Marquette Railroad Surveys.....	518
Fox River Valley R. R.....	518
Buffalo & Lake Huron R. R.....	518
Railroad Bridge at Kilburn City.....	518

#### MISCELLANEOUS.

Business and Railroad Facilities of Milwaukee..	512
Resources of the East India Company.....	514
An Important Bridge Decision.....	515
Mischief of the New York System of Allowing Interest on Deposits.....	519

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	516
London Quotations.....	517
Sales at the New York Stock Board.....	517
Monetary and Commercial.....	517

☞ We understand that the Chief Engineering of the projected railway from Vera Cruz to the City of Mexico, had been tendered to Col. TALCOTT, Chief Engineer of the Ohio and Mississippi Road.

☞ The Detroit and Toledo branch of the Michigan Southern road is now open for through business, with three trains daily between the two points. Close connections are made at Toledo with all important trains both from the east and west.

### THE COMMERCIAL CRISIS OF THE DAY.

Commercial revulsions have occurred, at short intervals, ever since man ceased to be a mere tiller of the ground, and yet nothing is received with more surprise. Men are as much startled now to find themselves in the midst of failing banks and insolvent merchants as if no such thing had ever occurred. They act like those who have always enjoyed perfect health and find themselves sick. They know that sickness must occur, but wonder why *they* should be sick! It is thus we reason about all the *hazards* of life: we remember only our present circumstances—we forget the past, and see the future only in roseate hues. But we should recollect that all that is valuable in business transactions is subject to *hazards*. The steam engine is liable to the explosion of the boiler; the locomotive is liable to run off the track; a bank may fail; a merchant may suspend payment; and the best and ablest of men may commit errors. We cannot escape liability to error or misfortune. Shall we, therefore, give up commerce and distrust human nature? Shall we never use this most powerful and wonderful steam engine because the boiler may burst? Shall we never take a bank note because the bank may fail? Shall we never give credit because a merchant suspends? Shall we never trust in men because some are rogues? This denial of faith—this giving up the finest inventions and the best institutions of commerce because they are liable to *hazards*, is what no intelligent or prudent man thinks of; but yet he is very apt to single out something on which to pour out his censure. In the early stage of the present embarrassments (and we speak of it mainly on that account) nothing was so common as to abuse railroads, by assuming and asserting that they were the great cause of embarrassments. In 1854, when there was also a temporary crisis, there was some plausibility in charging them with a large portion of the difficulties. Railroads had been made with great rapidity. The debts due on them were very large. But the great sacrifices of that period fell upon the railroad companies themselves. The public suffered but little from that source. The companies, many of them, were however, compelled to sacrifice stock, bonds, and pay enormous interest, or stop their work, and leave their roads worthless. Fortunately, most of them finished their roads. But few others were undertaken, and now the public have had three years of incessant warning, in which to prepare against this terrible danger of railroad insolvency; and what has followed? Two railroad companies only, we believe, have failed (the *Michigan Southern* and the *Fond du Lac*), whose liabilities, subject to demand, amount to between three and four millions. But what do we see! Bank after bank, merchant after merchant, broker after broker fail! fac-

tories fail! The suspension list of one week contains hundreds of names, who have failed to the amount of twenty millions! This is not a railroad disaster, by any means, and this one good, if no other, will come out of it: that the public mind, which has been much abused on this subject, will learn that railroads are far from being the only causes of commercial disaster. We now find that the *effect* was put for the cause. Railroad companies were first embarrassed because they handled immense sums of money, much of which had to be borrowed—so that when a commercial *pressure* came they were among the first to feel it, and very naturally were among the first to resort to temporary loans and high interest. This was a *consequence*, not a cause of the commercial crisis.

Again, there are many who are yet more erroneous, in ascribing the commercial difficulties to the *banks*! Why, the banks are nothing but commercial machines—facilities for the transaction of the general business. Does the bank owe the public for its notes? Does not the public owe it for notes discounted? Is not the bank, in nearly every case, more a creditor than a debtor? If there be no commercial revulsion, a properly conducted bank will have no pressure upon its means. Its commercial notes will pay its own liabilities. What then embarrasses the bank? Simply that a commercial crisis *has already begun*, of which the public scarcely dream of. The bank feels this reverse wave, and quietly strengthens itself. The commercial public soon begin to feel the pressure, and apply to the banks. The banks cannot supply their wants, and merchants complain. In all this the bank is in precisely the same position as the merchant. Both are suffering under the reverse action of the great commercial tide. If the bank, or the merchant, or the railroad company fail, it is precisely from the same cause. Both, in flood tide, have *overtraded*—involved themselves in liabilities beyond their *present means to meet*. They may be solvent, but they are in the ebb tide of commerce. The simple fact is, the *overtrading* of the commercial world, and the *extravagance* of the people, have done all the mischief to railroads, banks, merchants and people. Well, what is to be done? In the first place, it is not half so bad a storm as is thought for. The great mass of the people are solvent, solid, even rich. Those who are affected are almost exclusively among the mercantile classes, who have been imprudent, and gone into extravagant speculations, whether of imported goods, or stocks, or adventures. The body of the community is sound and safe. And now, the thing to be done is to stand *firm*; give way to no panic of any sort. But, above all, have *confidence*, moral courage, faith in the stability of society, the success of commerce, and the general honesty of mankind.



### ERIE R. R.—NEW LOAN.

In another column will be found the reported proceedings of a meeting of unsecured bondholders and stockholders of this road, held at the call of the new President, Mr. Moran.—The difficulties that surround the road Mr. Moran thus explains:

The most important difficulty the road had to contend with was the strike last fall. Owing to a policy which occupied itself with minutiae to the exclusion of the main chance, the best set of engineers ever gathered in this country was dispersed. They spread reports all over the country unfavorable to the road; they said it was served by incompetent engineers, by mere boys—and what they said was in part true. The strike was followed by a December and January change, while the road was blocked up by snows, and an inundation in February, which destroyed the most important bridge on the road. Constant rains kept the road in a state of liquefaction until July, and the result of all this had been that during the first six months of the present fiscal year there had been a

Diminution of receipts of.....\$334,000  
Increase of expenditure.....482,000

Comparative balance against the Co.....\$1,016,000  
Notwithstanding that loss, the road had gone ahead within the last two years between four and five hundred thousand dollars. If, under such unfavorable circumstances as these, such results could be obtained, what would they not be when the large crops of this year came in, and when economical and active management had made the road as productive as possible? When he assumed the Presidency of the road, its great difficulty was that out of the two millions of floating debt \$1,500,000 became due this month, and they had nothing to rely upon but the current receipts of the road. The former Treasurer, Mr. Daniel Drew, said he would carry the road through August, and he did so; but with end of August, and the failure of the Ohio Life & Trust Company, commenced the present crisis.—They then had to meet this enormous payment of \$1,500,000 without knowing where we were to get the first cent. He consulted James Brown. The Board of Directors had created \$6,000,000 of new mortgage bonds, which were offered to the holders of unsecured bonds, payable half in unsecured bonds and the other half monthly installments of 10 per cent. They concluded to call a meeting of the banks, and propose that if they would furnish \$600,000, private individuals would furnish \$250,000, which would enable the road to get through.

In 1854 the Directors, in a similar crisis, had paid \$40,000 to Cornelius Vanderbilt for his endorsement on \$400,000 for six months, and created a chattel mortgage on the rolling stock to secure him; and while he was in Europe this summer they had unfortunately resorted to the same means of raising money, paying Mr. Daniel Drew \$25,000 for endorsing \$1,250,000, and securing him in the same way. This, however, was destructive to the credit of the road. Mr. Moran did not think that in this last case the remuneration was large, but he would not have agreed to it, even at the risk of the failure of the company. He acknowledged his obligations to the banks, and especially to the Bank of Commerce. Last Monday when, at 2½ o'clock, their Treasurer, Mr. Gelpeke, had found it impossible to make his bank account good, advanced on his own responsibility \$50,000 to the company, as he

knew that the failure of the Erie Road would involve the ruin of everybody depending upon credit in this community. From four or five banks he got the required assistance, only between 11 and 12 o'clock on the day they had to pay the coupons. He got \$575,600 from the banks and \$10,000 from individuals, but they had been able thus far to meet their daily payments. This was almost entirely owing to the efforts of their Treasurer, Mr. Gelpeke. Mr. Daniel Drew could take possession under his mortgage at any time. The Treasurer had been able to carry the road through thus far; whether he would be able to do so in future, some of those who had to raise money for themselves might conceive.

The indebtedness of the Erie Railroad, according to Mr. Moran's financial statement, is as follows:

	Sept. 30, '55.	Sept. 30, '56.	Sept. 30, '57.
Funded debt.....	\$24,891,000	\$24,891,000	\$24,891,000
Floating debt.....	1,311,763	1,149,970	2,437,369
Int. unpaid.....			69,000
	\$26,102,768	\$25,995,970	\$27,397,369
Less Sink. Fund	322,000	794,000	1,356,000

These are the figures as they actually were, or were said to be, on September 30, 1857, and show a large increase of indebtedness, wholly in that troublesome item, *floating debt*. Mr. Moran balances this by the following estimate of the *probable* position of things on Jan. 1, 1858:

Total indebtedness.....	\$27,141,000
Less Sinking Fund.....	1,500,000
	\$25,641,000

In the same estimate he gives the *probable* receipts for 1857 the same as 1855-6, while in his previous statement he shows the *actual* receipts of the first six months to have been over half a million less. How then can he estimate the *probable* indebtedness of the road on Jan. 1, 1858, at a quarter of a million less than its present *actual* debts we cannot imagine, unless it be to try the *experiment* of estimates on actual figures.

Mr. Moran asks for a new loan of six million dollars, one-half payable in unsecured bonds, and one-half in monthly installments of 10 per cent. each. And Mr. Lathers, Chairman of the Finance Committee, tells us that if this loan is secured the stock of the road will run up from 35 to 70—he is sure of it. What an *experiment*. There is eleven millions of stock; this whole eleven millions, according to Mr. Lathers, is worth \$3,850,000, and according to the quotations at the stock board, \$1,980,000. The Directors now ask the stockholders to pay in \$3,000,000 of cash, and their *eleven millions* of stock will then be worth \$7,700,000—a clear gain to the stockholders, according to Mr. Lathers, of \$850,000; or, according to the stock board, of \$2,720,000.

So much for estimates, and the financiering of the Directors. Such financiering should be well paid for, and, if we may trust the statements of the President, has so far been lucrative. Mr. Moran feels it necessary, while applying for a loan of six million of dollars, to apologise for receiving from the road a

salary of only \$25,000 per annum. He says he fills the offices of President and Superintendent, which together had cost the company \$20,000 per annum; and that his salary is an advance of *only* \$5,000 on the combined salary of both offices. A very moderate advance, we must admit, when given to such a man as Mr. Moran, but which of itself would be quite a respectable salary for a first class practical railroad man, capable of discharging the active duties of Superintendent. How these duties will be discharged by a man who never knew anything of either the shop or the road, remains to be seen. It may be *estimated* in the same manner as Mr. Moran estimates the probable financial position of the road on the 1st of January, 1858. But when the 1st of January comes, and the reality does not warrant the estimate, we would suggest that Mr. Moran should have a first class excuse ready framed, so as not to disappoint too greatly the expectations of his stockholders.

**SUNBURY AND ERIE RAILROAD.**—The Erie Gazette states, that means have been secured for the construction of one hundred miles of the western division of this road. And that negotiations are in progress, which will secure the completion of 33 miles between Williamsport and Farrandville.

**HARTFORD AND NEW-HAVEN RAILROAD COMPANY.**—The annual meeting of the stockholders of this Company was holden at the Company's office, in Hartford, on Wednesday, Sept. 16.

The annual report shows the usual prosperous condition of this well managed Company. The income of the Company for the year is as follows:

From passengers.....	\$455,035 65
From Freight.....	274,682 94
From rents, express and mails	39,367 01—\$769,065 60
Expenses of operating road, repairs of road and equipment and general expenses, including new locomotives....	372,807 67
Net earnings.....	\$396,257 93
Interest on bonds.....	55,423 36
Total.....	\$340,834 57

The gross earnings exceed those of last year by the sum of \$38,270 93.

The trains on the road have been run with the accustomed regularity, no passenger having received an injury during the year.

A semi-annual dividend of \$5 <sup>1</sup>/<sub>2</sub> share has been declared, payable on the 1st of October next.

The report enters at some length into the relations of the Company with the New York and New Haven Railroad Company, complains of violations by that Company of contracts between the two in reference to the canal road, states that these violations have been continued, notwithstanding repeated remonstrances, and that a suit has been commenced against that Company based on those violations.

The stockholders, by unanimous vote authorized the Directors to adopt such further measures for the protection of the interests of the Company as they should deem expedient.



# Railroads.

## CENTRAL OHIO R. R.

We are in receipt of the Ninth Annual Report of this Company, showing its position up to the 1st of August, 1857. This Company is one of the number which found themselves so embarrassed that they could not make a satisfactory statement, and hence made none last year. The result, so far from answering the expectations of the officers, was a source of doubt and distrust infinitely worse than the worst reality. We are glad to see a change of policy in this respect, and trust the Road will, in the future, be prompt in making reports. The Report of the President says:

In obedience to the requirements of law the President and Directors of your company submit to you this, their Ninth Annual Report, in which a clear and distinct statement of the affairs of the company is believed to be made.

On the first day of November, 1854, the first train of cars were run over the entire length of our road, from which period to the present, trains, both passenger and freight, have been run with more regularity than ought to be expected upon a road so prematurely brought into service.

That all proper efforts were made, from time to time, to relieve the road of the difficulties which attended its working, because of its unfinished condition, we have no reason to doubt; but that we were working an unfinished road, and at great cost, because of its being unfinished, were facts which were communicated to you at your last annual meeting.

During the past year we have labored to remedy the difficulties arising from the condition of the road, and have only to regret that the embarrassed situation of the company has not allowed us to expend a larger amount of money in putting it in better working condition, and thereby enabling us to do our business with greater safety and economy.

Upon this department of our service our entire expenditure has been \$156,450 71. In making this expenditure, and keeping the accounts thereof, we have kept in view the distinction between ordinary repairs and extraordinary repairs, or construction. It would be manifestly improper to charge the management of any road in its account for ordinary expenses, with those expenditures made necessary because of its unfinished condition, and made with the view of completing it.

The ordinary repairs amounted to.....\$94,852 30  
The extraordinary repairs amounted to..... 61,598 41

In all.....\$156,450 71

The condition of our rolling stock has materially improved since your last annual meeting.

Of the 38 locomotives owned and now on the line of road, 34 had been purchased before the road was opened to the Ohio river, and 27 delivered. A large number of the cars, also, had been purchased and delivered before the same period.

At the time these locomotives and cars were built, the character and wants of the road were wholly unknown to the manufacturers, and untried to the proper officers of the company ordering them; they were not long in service before the inadaptation of

many of them to the road became manifest, and that expensive alterations were necessary to enable us to work them with safety and economy. These alterations, during the past year, we have progressed with as fast as our means would justify, and for that purpose have expended in the

Alteration of Locomotives.....	\$20,464 00
Rebuilding do.....	17,352 85
do Cars.....	14,850 00

Total extraordinary.....\$52,666 85

The locomotive *Black Hand* has been rebuilt at a cost of \$5,798 10; the *Reindeer* converted into a stationary engine at a cost of \$2,736 16; the *Zanesville* and *Washington* being rebuilt, upon which has been expended, on the first \$3,627 71, and the second \$5,002 49; in all, expended upon these four engines \$17,074 46.

The average cost of each engine for every hundred miles run is \$14 64. The aggregate from which this average is ascertained includes the 20,464 of extraordinary repairs to locomotives, which should be deducted, for the same reasons assigned in speaking of the extraordinary repairs to the road, and when deducted would leave the average cost at \$10 23 per hundred miles, which, in view of the condition of the road, and of our necessarily using them (for the want of a sufficient supply of machinery) when they should have been in the shop, is by no means an excessive average.

We have lately purchased four first class freight locomotives, which have been delivered on the line of our road, but have not yet been put in service; with this addition to our locomotive power we expect to be able to do all the business which may be offered us promptly and satisfactorily.

The want of sufficient machinery was a very serious difficulty with which we have had to contend the past year. Shortly after your last annual meeting the business of our road began to advance very rapidly. An amount sufficient to increase our receipts to from \$100,000 to \$120,000 per month was offered us; we were anxious to accommodate this business, and brought into service every piece of machinery upon our road which was at all fit for use, but with all the exertions we could make, we fell far short of the requirements.

The service performed in this effort to answer the demands made upon us was at an unusually heavy expense. To work a road which is in good order, with machinery sufficient in amount, in good repair, and adapted to the road, is at best a costly operation, but the cost, although it must be, and in this instance is, charged to ordinary expenses, is greatly enhanced when the road upon which the service is rendered is in an unfinished condition, with machinery in capacity not equal to the service, and much out of repair. We hope that by the purchase of new machinery, the alteration and repairs of the old, which has been done the past year, we will be saved those difficulties and the attending expenses, as the business of the present season increases.

We recommend that the policy herein indicated, as having governed us for the past, be pursued for the future; and that, after the payment of the expenses of working the road, the interest upon the bonded debt and upon those debts for which the securities of the company are held as collateral, the balance of the earnings be applied to the improvement of the road and machinery, until they are made equal to the wants of the company.— Thus the value of the property will be in-

creased to the stockholder, and the security to the creditor, whilst the ability of the company to respond to the demands of both will be greatly enlarged.

Our income the past year, notwithstanding all the embarrassments by which we have been surrounded, the difficulties we have had to encounter in the working of our own road, and our uncertain relations with some of our connecting roads, have been \$712,213 19, an excess over our receipts of the previous year of \$217,508 87.

The total debt of the company, bonded and floating, as will appear from the auditor's report, is \$4,979,372 37.

If ever our road, with its machinery, is put in a condition in which it can be pronounced finished, we have every reason to believe that it can be worked as cheaply as the average of roads of the same length. Suppose, then, that average to be 50 per cent. of its gross earning, and you have, in the earnings of the past year, an amount sufficient to pay the expenses and ordinary repairs of the road and pay the interest at the rate of 7 per cent. upon the entire debt of the company; but that the earnings are to be nearly, if not quite, doubled within a few years, is a conclusion to which we are constrained in view of the many advantages of its location and connections. We therefore see nothing in the prospects of the company which should discourage you, much less its creditors. A little indulgence on their part will secure to them the full amount of their claims; a few years forbearance on ours will secure to you a reasonable per centage on your investments.

Our policy for the past year has been to pay promptly all the employees; for all material or stock consumed, and to make no contract, for machinery or otherwise, which we did not suppose we would be able to meet out of the earnings of the road.

For the year we have delivered to the Baltimore & Ohio Railroad, which, until within the last few weeks, has been our only eastern outlet, 21,692½ passengers. We have received from that road, for the same period, the number of 14,789 passengers; an excess in favor our road of 6,903½ passengers.

We have delivered to the Baltimore & Ohio Railroad 51,881 tons, equaling 5,764½ car loads, more of freight than we have received from it, allowing nine tons to the car.

We are gratified to be able to assure you that our relations with all the railroad companies with which we have any business intercourse continue friendly. The mutuality of our interests are being appreciated and fully recognized.

On the first day of March last T. Perkins resigned his situation as Superintendent of our road, since which time we have been working the road without a Superintendent, the President assuming, so far as has been necessary, the duties devolving upon that officer.

On the 19th day of June last we entered into a contract with the Directors of the Steubenville & Indiana Railroad Company, by which we agreed to carry all the traffic that road would bring to us at Columbus or Newark, over our road between Newark and Columbus with the same dispatch and care with which we did our own business, and that we would divide with them the proceeds of such service, in proportion to the miles run over our respective roads.

Since your last annual meeting an arrangement has been made with the Cleveland & Pittsburg Road by which that road was ex-



tended from Bridgeport, opposite Wheeling, to Bellaire, securing to our company the privilege of running our trains to and from Bridgeport, for the purpose of doing the business which may offer at that point. The precise point for the interchange of business between the two companies has not yet been finally designated; the interest of both, however, being identical, no difficulty can arise. From this connection a large and profitable business is confidently expected.

We have reason to congratulate you that another year has passed without any passenger being killed or seriously injured on our road. That those under our employ are generally sober, competent and respectable men, who observe strictly all our rules and regulations, and are diligent in their attention to the comfort and safety of passengers and the preservation of property entrusted to them.

All of which is respectfully submitted.

By order of the Board,

E. FASSETT, President.

The report of the Auditor gives the following balance sheet:

ASSETS.	
Construction and equipment of road, viz:	
Construction account.....	\$5,249,154 12
Accounts, when adjusted, chargeable to do.....	250,897 74
Real estate, depot grounds and machine shops.....	131,516 08
Office furniture at stations.....	1,676 17
Machinery, viz—Locomotives, cars, &c., prior to August 1st, 1856.....	770,664 28
Two locomotives purchased since.....	18,000 00
Other assets:	
Advances for renewal of company's obligations.....	12,773 50
do on real and personal estate security.....	40,003 52
do of capital stock, as collateral to bills payable.....	30,350 00
Trustee of Harris Farm, Bellaire.....	17,208 43
In suspense.....	826 65
Individual accounts.....	18,957 41
Bills receivable, amount prior to Aug. 1st, 1856.....	1,851 82
Do., amount due on freights past year.....	4,837 71
Stock in C., W. & Z. R. R. Co., deposited as collateral.....	100,000 00
123 shares C. O. R. R. Co., in agent's hands.....	6,132 89
Stock of materials, &c., in machine shops.....	21,812 40
Assets accrued since Aug. 1st, 1856, viz:	
Advances on locomotives purchased since August, 1856.....	10,093 60
do for payments of work on contracts and amounts due for freights and passengers past year and remittances for payment of interest on bonds during the past year (coupons not yet returned).....	109,134 05
do for fuel in August, '57.....	1,812 19
Suspended debt.....	6,577 22
Cash in Treasury.....	5,410 39
	\$6,818,733 17
LIABILITIES.	
Showing the property, assets, debts and liabilities of the Company.....	
Capital stock.....	1,726,856 18
Less am't. dep. as colat.....	100,000 00
	1,626,856 18
BONDED DEBT.	
First Mortgage Bonds due Feb 1, 1861.....	450,000 00
do do May 1, 1864.....	800,000 00
Second Mortgage Bonds due Sep. 1, 1865.....	800,000 00
Less am't dep. as colat.....	15,000 00
	785,000 00
Third Mortgage Sinking Fund Bonds* due April 1, 1883.....	950,000 00
Less dep. with Trustee as basis for Sinking Fund.....	100,000 00
Less dep. as colat. to bills payable.....	848,000 00
	948,000 00
	2,000 00
Fourth Mortgage Sinking Fund Bonds† due July 1, '78.....	1,205,100 00
Less dep. with Trustee as basis for Sinking Fund.....	\$200,000 00
Less dep. with ag'ts to fund debts.....	10,600 00
	210,600 00
	994,500 00

Income Bonds issued, due 1857, '58, '59 & '60 includ. \$100 domestic bonds of various dates.....	1,344,500 00
Less of \$500 and \$1000 b'ds dep. as colat. to E. P.....	754,500 00
Less of \$100 bonds dep. as colat. to E. P.....	27,700 00
	782,200 00
	562,300 00

Income Bonds issued to Musk. Co., to pay subscription to C. W. & Z. R. R. Co. Stock due Jan. 1, 1862.....	100,000 00
Unfunded or floating debt.....	

Due county & Dividends No. 1 and 2 for interest on stock.....	5,538 17
Due dividend and int. scrip for int. on stock.....	32,959 51
Individual accounts.....	14,243 71
Bills payable, for debts acc'g prior to Aug. 1856.....	1,232,230 98
	1,285,572 37

Liabilities incurred the past year, viz:	
Bal. of transportation accounts see table II. Due for advances to pay interest on Mort. Bonds.....	134,370 21
Due to other roads on acct. of freight & pas. Bills payable, for payment of interest, and on locomotives and materials.....	7,773 39
Due on acct. of salaries, materials & pay roll for July.....	1,563 12
Rent account.....	28,976 13
Transport. receipts, received in Aug. 1857.....	29,878 50
	352 73
	9,590 54
	212,504 62
	6,818,733 17

\* It is understood that some \$25,000 of this class of bonds have been negotiated, but account of sales had not been rendered up to close of this statement.  
† Of this class of bonds the Company have authorized an issue of two millions of dollars, for the purpose of funding their floating debt.  
‡ This amount is August earning 1857 up to close of statement.

The receipts of the Road for the year ending August 1, 1857, have been:

Passengers.....	\$276,369 99
Express.....	10,629 32
Mails.....	29,381 00
Freight.....	296,532 98
Total earnings.....	\$712,213 19
Total expenses.....	577,842 98
Net earnings.....	\$134,370 21

Or over 8 per cent. on the capital stock of the Company.

The progressive increase of the earnings of the road for the past three years is as follows:

Total Earnings, 1855.....	\$363,333 68
" " 1856.....	494,704 62
" " 1857.....	712,213 19

The increase over the year 1855, is mainly in freight, the amount of which has more than doubled since that time.

The position of the Central Ohio R. R., as exhibited in the above statements, is greatly different from what we had expected to find it. The great difficulty it has had to encounter was the undertaking the work of construction with an inadequate capital. The embarrassments consequent upon such a state of affairs created a large floating debt. This should be funded, and the officers left free to devote their time and energies to the actual working of the Road. The officers for the year are:

ELIAS FASSETT, President; H. J. JEWETT, Vice President; DANIEL APPELGATE, Treasurer; WILLIAM WING, Secretary and Auditor.

ROCK ISLAND RAILROAD.—CHICAGO, Sept. 23. In the case of the steamer Effie Afton vs. the Rock Island Railroad Company, relative to a certain bridge, which has been on trial for two weeks, in the Circuit Court, the jury failed to agree, and were discharged last night.

## BUSINESS AND RAILROAD FACILITIES OF MILWAUKEE.

REPORT OF THE COMMITTEE OF BOARD OF TRADE.

To the Milwaukee Board of Trade:

The Committee appointed at a special meeting of the Board of Trade, held at their rooms on Saturday morning, Sept. 5th inst., under defined instructions, submit the following

### REPORT:

Upon careful inquiry into the object of this commission, your committee have concluded that the leading purpose should be to allude to some of the main sources of traffic possessed and to be acquired by Milwaukee, that will accrue to the benefit of the Detroit & Milwaukee Railway. In addition to certain facts and statistics which are presented, it is only necessary to accompany this report with the annexed resolutions, expressive of our sincere interest in the enterprise under consideration.

In preparing a report of this character your committee have found no little difficulty in selecting from the various railroad, mercantile, agricultural and industrial departments of business those which will alone bear upon the traffic of this new channel of communication with the Canadian and Atlantic cities. As it will most certainly become the main thoroughfare for the business and travel of Wisconsin, Northern Iowa and Minnesota, with Canada and the Eastern States, it cannot but deeply affect the various interests of this region, and more particularly those of Milwaukee. On the other hand, the road will be dependent, in a very great measure, for its support, upon the business contributed by our own city.

Milwaukee, in 1850, contained 20,000 inhabitants; in 1855 it contained 31,000; and on the first of July, 1857, a careful estimate made up from the number of dwellings erected, gave us a population of 50,000.

As much of the success of this enterprise depends upon the harbor of this port, it is not inapt to allude to its capacity. The Bay is semi-circular, six miles from point to point, with a depth of about 2½ miles. In addition to the natural harbor formed by the mouth of the river, the city has constructed a "straight cut" from the river across the neck of land between it and the Lake shore, 260 feet in width, thus affording an artificial entrance to the river, which is protected by substantial piers, and which cost something over \$100,000. During the whole of last winter this new harbor, or "straight cut," was not at all obstructed with ice, and there was not a day during the most severe of the cold weather, when a steamer could not have entered and departed with safety. When it is considered that Atlantic harbors, as far south as Norfolk, will partially close up with ice at times during the winter, it would seem unnecessary to enlarge further upon the superiority of our harbor facilities, and its capacity for affording accommodations to the Grand Haven steamers at all seasons of the year.

The States and Territories now populated, and lying west of Lake Michigan, and dependent upon it for their natural and most direct water communications with the East, contain over 200,000 square miles of agricultural territory and possesses a population of no less than one million six hundred thousand inhabitants. All this territory and these people are better accommodated at Milwaukee than any other port on Lake Michigan, as a glance at the numerous railways centering here, and



radiating in the different directions alluded to, will verify.

The aggregate number of arrivals and departures at this port, for the year 1856, was 5,000, with an aggregate tonnage of over 2,000,000, and with seamen to the number of 84,549. The tonnage of this entry district now amounts to nearly 30,000, and includes all classes of Lake craft. The total value of merchandize imported during the year 1856 was \$28,000,000, and the value of the exports was over \$20,000,000. The dutiable goods entered at this port will amount for the present year to over \$1,800,000, and the duties collected will nearly reach \$500,000.

The amount of wheat exported from September 1st, 1856, to September 1st, 1857, inst., reducing flour to bushels was 4,881,000 bushels; and, with the present prospects, we have no hesitancy in placing the estimate for the year to come, or the crop of 1857, at upwards of 6,000,000 bushels.

As an evidence of the growth of Milwaukee we would say that by actual returns, as prepared by the Secretary of this Board, for 1856, there was expended in building \$2,150,000, using 30,000,000 of home made brick; and by the enterprise of a gentleman of this city, it has been ascertained that there are now constructing nearly 2,000 buildings within our corporate limits. Some of these are massive and valuable business and public buildings. These improvements will consume over 50,000,000 brick and 75,000 bbls. of lime, all manufactured in this city and its suburbs.

During the present year there has been added 20 per cent. to the wholesale mercantile facilities of the city. In 1856 the amount of sales, by exclusively wholesale and jobbing houses, was \$16,942,000.

The manufacturing interests of Milwaukee have kept even pace with her commercial and mercantile interests. By actual statistics, presented to this Board, the total aggregate amount of manufactured articles was as follows:

Year.	Value.
1854.....	\$ 4,633,000
1855.....	5,590,000
1856.....	8,357,000
1857.....	10,509,000

There is no city in the United States that comparatively sustains so large a number of respectable newspapers as Milwaukee. There are *eight daily* papers printed in the city—five English and three German—all enjoying a patronage which speaks well for the enterprise and intelligence of all classes of our population.

The railroad system of Milwaukee, as now completed and in progress, is perhaps inferior to no city in the country. We have no space to enter at length upon the conditions and prospects of these roads; all and each of them are of importance sufficient to enlist the co-operation of many leading men in their construction. An outline of these roads, and a brief allusion to their business, is all that can be expected at our hands.

The Lake Shore Road to Chicago, a distance of 85 miles, has been in operation two years, and is earning a handsome dividend above all interest and sinking fund accounts. The number of passengers transported in 1856, was 190,000, and the number in 1857 cannot fall below 230,000 to 250,000. This number does not include the passengers taken by the company's steamers to and from Chicago.

The Fox River Valley Railroad runs south through thriving towns to the State line, where it connects with the Kenosha & Rock-

ford Road, now nearly completed. This road has 12 miles of its southern end constructed, and has advertised to contract the whole line to Milwaukee during the present month. It is confidently expected that it will be completed and in operation before the close of the year 1858.

The Milwaukee & Beloit Railroad connects with the Racine & Mississippi Railroad at Delavan, 49 miles from the city of Milwaukee, from whence to Savannah, on the Mississippi river, is 89 miles, making the entire line, from Milwaukee to Savannah, 138 miles.

This is the shortest line of railway that has been undertaken between Lake Michigan and the Mississippi river. The road is graded from Milwaukee to East Troy, 32 miles, and a large force is engaged on the work between East Troy and Delavan, and the company expect to lay the iron as far as East Troy by the 1st of January, and through to Delavan by the 1st of June next, by which time it is believed the Racine & Mississippi Road will be finished through to Savannah.

This road passes through several of the richest and most populous counties of Southern Wisconsin and Northern Illinois, and will supply them with merchandize and manufactured articles from the Eastern markets and at the same time it will open to them the shortest and cheapest route to the best harbor on Lake Michigan for all agricultural products.

Sabula, opposite Savannah, is the Eastern terminus of the Great Iowa Central Railroad, extending across the entire State to the Missouri river, a distance of 350 miles. This latter road has the advantage of a munificent land grant, and is all under contract.

The Milwaukee & Mississippi Railroad, running nearly west, through Madison, the capital of the State, to Prairie du Chien, on the Mississippi river, is now completed and in successful operation a distance of about 200 miles. At the Mississippi river it employs a line of steamboats for all points on the upper river. This road now runs three passenger trains daily and connects with the Chicago, St. Paul & Fond du Lac Road at Janesville. The latter road is doing a handsome business from the traffic alone taken from it and given to it by the Milwaukee & Mississippi Road. At least one-half is *through* Eastern business, and, with the completion of the Detroit & Milwaukee Railway, this would seek its destination via Milwaukee, instead of the more circuitous route around the head of the Lake.

From Milton, through Janesville, the Southern Wisconsin Division of the Milwaukee & Mississippi Railroad branches, and is now open 22 miles, and is to be running to Monroe, 46 miles this autumn. A few miles west of Monroe a short branch connects this road with the Galena Road; so that through these different connections the Milwaukee & Mississippi Road will touch the Mississippi river at two points before the close of 1857. The enterprising cities of Galena & Dubuque will find their nearest route to New York and Boston via the Milwaukee & Mississippi and the Detroit & Milwaukee Railways. The earnings of this road for 1856, though not open to its terminus, were 22 per cent. above all accounts, and the Directors divided 17 per cent. during the year from actual earnings. Its total earnings for the present year will reach \$1,200,000, or about \$8,000 per mile upon the road operated for this year.

The Milwaukee & Watertown Railroad, formerly a distinct corporation, is now con-

solidated with the La Crosse & Milwaukee Railroad. It is now completed and in operation to Columbus, a distance of 62 miles from Milwaukee, and is to be extended to Portage, on the Wisconsin river, some 24 miles farther. This road passes through the flourishing city of Watertown, situated on Rock river, one of the most important milling and manufacturing points in the State. From Watertown a road is now under contract and mostly graded to Madison, the capital, to be completed during the present year.

The La Crosse & Milwaukee Railroad, and the land grant road, is one of the most important roads, considering its length, direction and different connections, leading into our city. The general course is northwesterly, and it reaches the Mississippi at La Crosse, about 200 miles from Milwaukee. The road is now completed and in operation to Kilbourn City, on the Wisconsin, 122 miles. The Western Division has been put under contract, the grading is to be completed this year, and the road is to be opened through by the 1st of November, 1858. The Legislature has given this company the land donated to the State, for the construction of a road from Portage to St. Croix, and thence to Superior, 350 miles. This land grant is valued at \$12,000,000. The earnings of the road, though doing exclusively a way business, will amount to over \$600,000 this year.

The Milwaukee & Horicon Railroad is a most promising enterprise. For the first 51 miles, to Horicon, Dodge county, it follows and occupies in common the track of the La Crosse & Milwaukee Railroad. At Horicon it leaves that road, and takes an independent route, pointing more towards the north, and passing through Waupun, Ripon, Berlin (on the Fox river), Stevens' Point (on the Wisconsin), to Superior City, on Lake Superior, 325 miles from Milwaukee. It is now completed and open to Berlin, on the Fox river, a distance of 92 miles, where it connects with a line of six steamers running upon the Fox and Wolf rivers and Lake Winnebago.

The Milwaukee & Fond du Lac Air Line and the Milwaukee & Superior Roads are owned by the same company. They both branch from the La Crosse Road, a few miles from this city—one to Fond du Lac and the other to run north along the Lake Shore.—The latter has 18 miles of its line nearly ready for the cars. Both are contracted for, and will be completed in a reasonable time—the first to Fond du Lac and the second to Green Bay, via Sheboygan and Manitowoc.

To complete this brief sketch of our railroads, we give a table, showing the entire lines of railroad radiating from this city, and also the distances now built:

Names.	Now Built.	Entire Line.
Lake Shore.....	85	85
Fox River Valley.....	12	42
Milwaukee & Beloit.....	32	138
Milwaukee & Miss. (main line).....	200	200
" (branches).....	44	97
La Crosse & Milwaukee.....	122	521
Milwaukee & Watertown.....	80	110
Milwaukee & Fond du Lac.....	—	70
Milwaukee & Superior.....	18	300
Milwaukee & Horicon.....	92	325
Total.....	685	1688

It is safe to assert that on the close of the year 1858 there will be 1,000 miles of these lines of road in operation, and they will bring to Milwaukee from 1,000 to 1,200 passengers daily. With this number of arrivals in the city, the estimate of 200 per day that would take the transit route to the East, seems safe and reasonable.

To those who have not investigated the



subject, a few facts in regard to the vast business of the valley of the Upper Mississippi and the country to the west of it, will be interesting and instructive. There are now engaged in the trade of the Upper Mississippi river nearly 100 steamboats. The aggregate arrivals at St. Paul for the present year will be over 1,000. The freight delivered at the different landings above Dubuque for 1856 amounted to over 150,000 tons, and the passengers that have been conveyed both ways can not fall short of 200,000 the present season. Until the past two months this enormous freight and travel has gone over the Galena & Chicago Railroad, as the most northern crossing from Lake Michigan to the Mississippi, and has helped to swell the traffic of that road to the wonderful figures which it reached in 1855 and 1856.

An important feature in the whole system of Milwaukee railroads is the fact that from all points on the Mississippi river where our roads touch there are corresponding lines building, continuing westward towards the Missouri river and the Rocky Mountains. Five years ago the States of Illinois and Wisconsin were as destitute of railways as Iowa and Minnesota are now, and yet Iowa and Minnesota are now improving as fast ever did Wisconsin or Illinois. We have no doubt that ten years from this there will be over a million and a half of people in Minnesota, every inhabitant of whom will reach the East cheaper and easier via Milwaukee.

With such brief data for a basis of calculation, your committee are of opinion that any extended deductions by them are unnecessary.

A. J. AIKENS,  
N. J. EMMONS,  
S. B. GRANT,  
Committee.

The following is a copy of the resolutions alluded to in the report, and which were unanimously adopted:

*Resolved*, That in view of the fact that the Detroit & Milwaukee Railway, by means of its connection with the Great Western Railway of Canada, will open to us the shortest and most direct line of communication with the Atlantic and Canadian cities, we regard the consummation of the work as an event of great moment to Milwaukee, and fraught with immense advantages to our city and the State at large; and we have received with peculiar pleasure assurances of an early completion of a railway which will thus connect us, via Detroit and Port Huron, with the Eastern world.

*Resolved*, That we will, as a body, and as individuals, do all in our power to encourage traffic over the lines of the Detroit & Milwaukee and Great Western Railway, of Canada; that in so doing we feel that we are fostering enterprises of common importance to the city of Milwaukee and the State of Wisconsin, and are destined to work great and good influence upon our prosperity.

*Resolved*, That while we deeply estimate the advantages to flow to us from a link with these great Eastern lines and thoroughfares, we believe that Milwaukee can more than reciprocate them; that her geographical position—the amount of her trade—her sources of traffic tending eastward—and other facts and considerations embodied in the report of our committee, submitted herewith, warrant and sanction such belief.

*Ordered*, That five hundred copies be printed of the above report for the use of the Board.

L. H. KELLOGG, President.

W. HENRY HOLLAND, Secretary.

#### RESOURCES OF THE EAST INDIA COMPANY.

The London *Economist* has a long statistical article, calculated to show that the present mutiny in India ought to have but little influence upon the English money market. It maintains that the East India Company is competent to meet all the liabilities arising from the crisis, without calling upon the home government. However much we may doubt this conclusion, both from the yet uncertain extent and protraction of the difficulties, and from the fact that it is British property that is suffering, and as such, whatever name it passes under, must make itself felt ultimately in England; still the statistics cited by the *Economist* are of general interest at the present time. We quote, in the first place, the ordinary sources of Indian revenue:

"According to the accounts made up for the year 1855-6, the gross revenue collected in India, exclusive of repayments and drawbacks, amounted to £28,812,097, and was derived from the following sources:

Land revenue.....	£17,817,299
Customs.....	1,934,906
Salt.....	2,455,389
Opium.....	4,871,227
Post Office.....	219,045
Stamps.....	594,339
Other receipts.....	978,902

Total revenue.....£28,812,097

"Upon this sum of £28,812,097 the cost of collection, including, however, allowances and assignments, payable chiefly out of the land revenues, in accordance with the treaties and other engagements, amounting to £1,244,498, was no less than £6,664,750.

"The gross and net income of the Indian government for the year 1855-6 may, therefore, be thus stated:

Gross income.....	£28,812,097
Cost of collection.....	6,664,750
Net income.....	£22,147,347

Against this net income of £22,147,347 we find the following charges:

Civil and political establishment.....	£ 2,276,262
Judicial and police.....	2,510,799
Public works.....	1,851,606
Military charges.....	10,417,369
Naval charges.....	598,070
Charges of Prince of Wales Island, Singapore, &c.....	64,612
Mint charge.....	62,573
Interest on debt.....	2,044,318

Total.....	£19,855,509
Charges in England, such as dividends, pensions, &c.....	3,264,629

Total charges.....£23,120,138

Thus, against a net income of £22,147,347, the total charges of the year amounted to £23,120,138, showing a deficiency of £972,791 added to the debt of the Indian Government in that year. But it is said that if an allowance be made for the amount expended on the public works, which must be regarded in the light of an investment, there would be a surplus of nearly a million over the expenditure. But it is not forgotten that a part of the land revenue, at least, must be interrupted by the rebellion. The *Economist*, however, says that this interruption occurs in those provinces whence less than a fifth of the revenues is derived. But there are annual charges in the revenue, for old stock, interest on bonds and Indian debt, amounting to £2,924,577. Thus we have the ordinary resources and liabilities of the East India Company. The *Economist* also says:

"To say nothing of the usual means which the East India Company has of recruiting its home treasury by drafts upon India, which no doubt it will be anxious to curtail to the smallest possible amount at this time, it appears that on the 1st of May it possessed

funds, in the shape of money, exchequer bills and bonds, and stock in the public funds, all at its disposal, amounting to £3,969,654, or close upon four millions; and we understand that the company have an unexhausted power of issuing bonds to the extent of £3,000,000 more. Independent, therefore, of any reliance upon India at all, the East India Company, in this way, may be considered to have at its disposal a sum of about £7,000,000, or fully double the amount usually required for meeting the annual home charges."

#### ERIE RAILROAD.

*Financial Condition of the Erie Railroad Company—Meeting of the Stockholders—The Address of President Moran.*

A large number of the holders of Erie Railroad Stock, met at No. 13 Broad street, yesterday, in answer to a call from the President of the Company; the object being to afford them a correct account of the condition of the Company, and make such suggestions as he deemed important. The meeting was organized by the appointment of JAMES BROWN, Esq., of BROWN, BROTHERS & Co., President, and W. T. JOHNSON, Secretary.

As soon as Mr. BROWN had stated the object for which the meeting had been called, the President of the Railroad Company proceeded to address them. He said they were all aware that the present financial crisis had destroyed credit generally, and particularly that of railroad companies. But before proceeding with a history of the affairs of the road, he desired to say a word in relation to himself and his relations to the Erie Railroad Company. And in so doing it was well that he should remark, that in view of the large contracts to be awarded and the other patronage of the office, he was not surprised that men had been found to accept the Presidency without a salary. In October of 1854, when he had induced his friends in Europe to invest their money in the road, and had done so himself, he was requested by a number of gentlemen having a large interest at stake, to allow his name to be used for a Directorship in the Company. He did so and was elected. The financial affairs of the Company were then in a straightened condition. Money was necessary; he set himself to obtain it, and succeeded in negotiating a loan of \$4,000,000. For that he had never received one cent, either directly or indirectly. Subsequently he went to Europe for the purpose of attending to the education of his family. While there the engineers' strike occurred, which had proven so disastrous to the interests of the Company; and it was while there that he had received letters from prominent gentlemen, begging him to return and take the Presidency of the Board. After some consideration he concluded to return to this country, although his family was much opposed to it, and give the interests of the road the benefits of his experience and advice. He was urged to such a course by the consideration that he had induced his friends to invest from \$25,000,000 to \$30,000,000 in the road, and in consequence of a conviction founded upon a knowledge of its resources. He came and accepted the office, and they had all seen what the newspapers had said in relation to the salary, he received. It was true that \$25,000 a year was a large salary, but before he accepted the office they had paid a President \$10,000 and a Superintendent \$10,000 per annum. He received \$25,000 for performing the duties of



the two offices; so that after all there was only an increase of \$5,000 per annum. As to the manner in which he had performed the duties, time would tell.

Of the financial condition and prospect of the road he presented the following statistics, with explanatory remarks:

## SEPTEMBER 20, 1857.

	Sep. 30, '55.	Sep. 30, '56.	Sep. 20, '57.
Capital Stock.....	\$10,023,939	\$10,000,000	\$11,000,000
Funded Debt.....	24,891,000	24,891,000	24,891,000
Floating Debt.....	1,211,768	1,104,970	2,437,209
Interest Unpaid....			69,000
Total Indebtedness..	26,102,768	25,995,970	27,397,209
Cash and Cash Items.	130,758	300,856	84,451
Materials.....	504,655	502,541	550,000
Fuel.....	497,115	728,463	610,000
Steamers &c., on L. E.	88,875	218,331	231,229
Rolling Stock loaned to C. and N. F.....	100,000	100,000	100,000
Other Agents.....	10,456	46,234	30,000
Due by Agents.....			250,000
Advanced to L. D. Co.			624,254
Bonds of 1855 in sinking Fund.....	322,000	794,000	1,386,000
Totals.....	1,703,857	2,690,425	3,925,934

Liab'l's over assets 24,398,911 23,305,545 23,471,275  
EARNINGS OF THE NEW YORK AND ERIE.

1852.....	3,340,150
1853.....	4,318,962
1854.....	5,259,935
1855—Short crop year and war in Europe.....	5,448,393
1856.....	6,349,050
1857—Strike of engineers and short crop (estimated, partly).....	5,760,000

Sep. 30, '55. Sep. 20, '57. Jan. 1, '58 (est.)  
Total indebtedness. 26,102,768 27,397,209 27,141,000  
Less sinking fund. 322,000 1,386,000 1,500,000

Real indebtedness. 25,780,768	26,011,209	25,641,000
Advances to Long Dock Co. \$684,254		\$1,100,000
Estimated Floating debt Jan. 1, 1858, including interest due on that day, all payments to Sinking Fund, and \$358,000 further advances to Long Dock Company.....	\$2,250,000	
Sinking Fund will hold Dec. 31, 1857.....	1,500,000	
ESTIMATE FOR FISCAL YEAR 1857-8.		
Receipts, same as 1855-6.....	\$6,350,000	
Expenses, 55 per cent.....	\$3,492,000	
(The expenses of 1856 were 3,146,994)		
Interest 7 per cent on \$28,000,000, amount of debt after negotiation of new loan.....	1,960,000	
Interest on Long Dock Stock.....	50,000—5,502,500	

Net income, 7 to 100 p cent, on \$11,000,000 \$347,500  
Less payments to Sinking Fund..... 420,000

Net income applicable to cash dividend.... \$427,500  
Equal to  $3\frac{7}{8}$  per cent on \$11,000,000, while on the 1st of February next the Sinking Fund will already have in hand bonds in excess of last stock dividend of \$1,000,000, to the extent of 5 per cent on \$11,000,000. The \$420,000 yearly payments to the Sinking Fund, joined to the interest on the bonds already purchased, will purchase (yearly) more than equal to 5 per cent, on the \$11,000,000 stock.

He presented the above statement with an idea of the policy of the present management, because the time for an annual election was approaching, and because he deemed it necessary that the stockholders should have a full knowledge of the Road and of the policy of those having the direction of its affairs, that they might judge whether such policy was in consonance with their own views. The history of Corporations proved that there was a vice in them which nothing but publicity could conquer. The Road had had great difficulties to encounter, and it was well that their extent should be known to all who were interested. Among the most disastrous of late, within itself, was the strike of the Engineers. That strike had dispersed, perhaps the most experienced and best set of officers that had ever congregated upon any single road. They were men scattered over other roads; and the bad feeling that existed caused them to circulate reports to the effect that the engines were run by mere boys, and men who knew nothing of their business.

Those reports had greatly injured the road. The public lost confidence in the road, and sent their produce by other rival routes. But they had recovered from that, and altogether, after a comparison of the Erie with the other rival roads—the New York Central, the Pennsylvania and the Baltimore and Ohio Roads—he was sure that the Erie possessed important advantages over all of them. He spoke at length on the financial difficulties that had been overcome since he had been in office, and urged the necessity of coming forward and securing the new loan. If that were done, he could get along comfortably—pay running expenses and proceed with the improvements on the "Long Dock lands," which in themselves would largely increase the business of the road, as they would then have a tide water terminus where the produce of the West could be brought in the cars to docks, where vessels drawing twenty feet of water could lie along side and take in their freight. And in addition to that, several heavy stockholders had assured him that whenever the docks were completed, they would erect storehouses in the vicinity with branch railroad tracts, that the cars might be run in and the freight discharged under cover. After having thanked Mr. JOHN A. STEVENS and the Bank of New York, the Mechanics' Bank and others, for the promptness with which they came forward to the aid of the management, he concluded. He opposed strongly giving chattel mortgages on railroad, and an assurance to the stockholders that he was opposed to any further increase at present of the capacity of the road. He was listened to with profound attention, and when he had concluded, an expression of satisfaction was general.

When Mr. MORAN had concluded, Mr. LATHERS, the Chairman of the Finance Committee, made a few remarks. He said the affairs of the road had been managed badly. He was willing to acknowledge that, and he blamed himself for it—but they were managed better now, and he thought it was good policy to secure such a change for \$25,000 a year, instead of continuing a bad mismanagement and losing millions thereby. He was sure that after the exhibit that had just been given by the President, all must feel that the bonds of the company should not be peddling in the street at such miserable prices. To raise them to something like their real value, all that was necessary in his opinion was, that the stockholders should come forward and subscribe liberally to the new loan. It was to their advantage to do so, for if they did not, there was no assurance that the road might not at any time go to protest. He thought the proposed loan might be negotiated in Europe, but submitted that with so valuable property at stake, it was bad policy to risk even a chance of failure. Their subscriptions were desired, more for the sake of restoring confidence than for the money; all that was asked at present was 10 per cent. Confidence was what was wanted, and if they would come forward and secure the loan, he was sure the stock would run up from 35 to 70.

Mr. LATHERS was followed by Mr. BENJAMIN LODER a former President of the road, who, like him, urged upon them the necessity of securing the loan, and was confident of the beneficial results that would follow to their own interest as well as to those of the stockholders generally. In conclusion, he moved the appointment by the President of the meeting of a Committee of Stockholders or citizens to confer with the Directors and

satisfy themselves of the condition of the affairs of the road, for the purpose of securing earlier and liberal subscriptions to the loan. His motion was adopted, and the following Committee was appointed by the President: Messrs. Benjamin Loder, J. A. Gourlie, Wm. Whiteright, Jr., John Stewart, Jr., with the power to appoint another.

When the meeting adjourned, the following subscriptions had been made to the new loan:

Gelpeke, Kentgin, Reichelt & Co.....	\$100,000
Brown, Brothers & Co.....	12,000
Sarzen & Dufais.....	6,000
George W. Vanstavoren.....	2,000
A. M. Cazzens.....	10,000
R. K. Hoffmire.....	8,000
W. P. Bolles.....	6,000

## AN IMPORTANT BRIDGE DECISION.

In the United States District Court at Trenton, on Tuesday, the Bridge cases were decided in favor of allowing the erection of both bridges across the Passaic river in Newark. This decision orders the application for an injunction to be dismissed, on the ground that the States have entire jurisdiction over rivers wholly within their limits, and any bridge authorized by the Legislature is lawful, however much it may obstruct the navigation.

The right to bridge navigable streams has, says the Newark Advertiser, always been a subject of interest, and being the great natural highways, governments have regarded with a jealous eye every project tending to obstruct them. Since the ancient maxims have become the common law, however, the progress of science has brought into use other modes of transportation, such as railroads, which have begun to compete, and in some cases to supersede them—especially in the winter season. To perfect their facilities, it is frequently necessary to cross navigable streams by bridges, and the question of their right to do so has therefore recently become of great importance in various parts of the country, where warm controversies have risen, and various decision have been rendered with different results.

The present cases rose some two or three years ago, when the New Jersey Railroad Company, for the purpose of shortening their main line, and avoiding the curves created by the present bridge, applied to the Legislature for authority to construct a bridge at the foot of Market street, considerably below the present crossing; at the same time the Plank Road Company asked for a bridge, to avoid the inconvenience and delay of their ferry. The navigating interests strongly opposed the projects, which were finally authorized; but to prevent obstructions to the navigation, they required that the bridges should have draws at least sixty-five feet wide, and also that the present railroad bridge should be removed. The navigating parties thereupon procured an injunction to stay proceedings, and carried the case into the United States District Court, where, after a protracted controversy, in which volumes of evidence were taken on both sides, the decision was pronounced yesterday, as above stated—dismissing the injunction in both cases, with costs, and leaving the parties at liberty to construct the bridges. There is some thought of an appeal from the decision to the Supreme Court, but no settled determination has been announced as yet.

The proposed bridges over the Passaic are hardly regarded as obstructions to the navigation, as the draws are to be made unusually ample, and on the whole, the decision of Judge Grier is responded to with general approval.—Penn. Inquirer.



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds.	Name of Company.	Quot' of Stock.	L'n'n of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp'sr	.....	173	6,000,000.00	.....	.....	.....	.....
498,800	6			1862-3	2d "	.....	Androscog'n & Kennebec	.....	54.55	1,400,000.00	.....	202,475.46	110,246.92	none.
199,060	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange..	.....	26.5	1,000,000.00	122,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646				now	"	.....	B'ng'r, Old T. & Millford..	.....	12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53
500,000	6			1860	"	.....	Boston & Worcester..	.....	44 5-8	4,500,000.00	500,000.00	1,102,781.90	437,062.03	180,000 4.6m
500,000	7		N. Y.	1866	1st mortgage.	.....	Buffalo & State Line..	.....	.....	1,300,000.00	.....	.....	.....	5 pr. ct. 6m.
300,000	7			1857-9-63	Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
200,000	7			1804	Domestic.	.....	"	.....	.....	.....	.....	.....	.....	.....
577,187	6				4th mortgage.	.....	Central Ohio..	.....	.....	.....	.....	.....	.....	.....
192,200	7			1872	1st mortgage.	.....	Champl'n & St. Lawrence	.....	43	1,872,800.00	1,001,027.00	162,200.00	77,700.00	10 per ct.
380,000	7			1874	2d "	.....	"	.....	.....	.....	.....	.....	.....	.....
1,440,000	6-7-8				Domestic.	.....	Ch'r'l'te & South Carolina.	.....	110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$12,300
1,300,000	8		N. Y.	4-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	.....	133	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
374,000				8-9	2d "	.....	"	.....	.....	.....	.....	.....	.....	.....
				8-76	Convertible.	.....	"	.....	.....	.....	.....	.....	.....	.....
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa..	.....	131	1,761,149.16	2,241,500.00	221,491.96	.....	.....
532,000					2d "	.....	Cin. W'p'ng'n & Zanés'ville	.....	.....	.....	.....	.....	.....	.....
104,000					3d "	.....	"	.....	.....	.....	.....	.....	.....	.....
305,500					Income.	.....	"	.....	.....	.....	.....	.....	.....	.....
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	.....	139	4,741,220.00	.....	1,375.4	700,204	6 per cent.
43,000	7			1861	1st mortgage.	.....	Cleveland & Mahoning..	.....	85	1,500,000.00	.....	.....	.....	.....
400,000	7				2d "	.....	"	.....	.....	.....	.....	.....	.....	.....
500,000	6			1873		.....	Cumberland Valley.....	.....	52	1,218,300.00	.....	160,511.56	81,101.56	\$33,250.24
000,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00	.....	.....	.....
350,000	7				1st mortgage.	.....	Eastern Railroad.....	.....	93 6-10	3,345,000.00	.....	665,578.79	282,077.84	\$234,133
740,000	10			1869	1st "	.....	East Ten. & Virginia..	.....	130	625,450.00	.....	30,897.30	19,692.30	.....
88,000	7			1861	2d "	.....	Essex Railroad.....	.....	20	700,000.00	.....	.....	.....	.....
400,000	10			1864	1st mortgage.	.....	Evansville & Crawf'd'vle	.....	109	2,222,657.50	.....	243,970.42	135,061.90	\$133,281.45
200,000	7				1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,340,000.00	.....	681,162.52	213,837.81	3 per cent.
					1st mortgage.	.....	Fox River Valley.....	.....	33	800,000.00	.....	.....	.....	.....
100,000	6				1st mortgage.	.....	Fair Haven Branch.....	.....	15	300,000.00	.....	50,321.23	14,822.45	\$160,240.00
100,000	6				1st "	.....	Georgia R.R. & Banking Co.	.....	233	4,156,000.00	.....	1,067,202.51	357,659.42	\$166,240.00
300,000	6				1st "	.....	G't Falls & Conway R.R.	.....	20	.....	.....	27,576.69	14,207.07	.....
4,000,000	6 1-9			1858	1st "	.....	G't West'n R. R. of Can.	.....	281 1/2	4,191,550.00	.....	2,065,836.00	.....	8 pr. ct.
2,000,000	7			1869-70	1st "	.....	Housatonic Railroad.....	.....	74	2,000,000.00	.....	339,196.50	176,329.92	.....
1,812,000	7			1860	2d "	.....	Hudson River.....	.....	144	4,000,000.00	.....	1,924,382.44	718,037.40	.....
12,885,000	7			1875	3d mortgage.	.....	"	.....	144	4,000,000.00	.....	.....	.....	.....
4,115,000	6			1876	1st "	.....	Illinois Central R. R.	.....	704	18,433,376.00	.....	1,476,035.27	1031,459.08	7 pr. ct.
3,000,000	7			1860	Freeland.	.....	"	.....	704	3,558,376.00	.....	.....	.....	3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.	.....	Indiana Central.....	.....	72 1/4	.....	.....	351,871.00	.....	.....
700,000	7	Jan. & July 1		1863	2d "	.....	"	.....	.....	.....	.....	.....	.....	.....
50,000	7				1st mortgage.	.....	Iron R. R.....	.....	13	123,700.00	.....	.....	.....	.....
700,000	7				1st mortgage.	.....	Kentucky Cen. 2d Div.	.....	.....	719,500.00	.....	.....	.....	.....
					2d "	.....	Knoxville & Kentucky	.....	.....	.....	.....	.....	.....	.....
218,000	7				1st "	.....	Laurens (S. C.) R. R.	.....	32	166,000.00	.....	23,233.59	14,233.59	.....
1,000,000	7			1866	2d "	.....	Louisville & Nashville..	.....	184	.....	.....	50,224.71	14,149.13	\$1,000
1,000,000	6			1875	1st "	.....	Lowell & Lawrence..	.....	12 3/4	300,000.00	.....	587,236.57	162,377.50	10 pr. et
2,000,000	7				1st "	.....	Mad River & Lake Erie..	.....	.....	2,697,090.00	.....	.....	.....	.....
2,500,000	7				1st "	.....	"	.....	.....	2,697,090.00	.....	.....	.....	.....
2,000,000	7			1868	1st "	.....	Manchester & Lawrence.	.....	26	1,000,000.00	.....	.....	.....	\$24,000
60,000	7 and 8			1874	2d "	.....	Marietta & Cincinnati..	.....	.....	.....	.....	.....	.....	.....
420,000	8			1867	1st "	.....	"	.....	.....	.....	.....	.....	.....	.....
329,000	8				1st mortgage.	.....	Mexican Gulf R. R.....	.....	27	.....	.....	.....	.....	.....
320,000	8			1881	1st "	.....	Milwaukee & Horicon..	.....	30	.....	.....	.....	.....	.....
6,000,000	6			1-68	2d "	.....	Mineral Point R. R.	.....	32	.....	.....	.....	.....	.....
				1884	1st "	.....	"	.....	32	.....	.....	.....	.....	.....
500,000	7				1st mortgage.	.....	Mobile & Ohio.....	.....	497	10,000,000.00	.....	253,498.96	162,802.24	7 pr. ct.
2,356,000	7			1869	1st mortgage.	.....	Nashua & Lowell R. R.	.....	15	600,000.00	.....	193,752.42	55,501.74	7 pr. ct.
8,892,600	6	May & Nov.	N. York		1st mortgage.	.....	New Haven & North'm'n	.....	55	922,500.00	.....	.....	.....	2 pr. ct. 6m
3,000,000	7	June & Dec.	N. York	1864	Con. till 1859.	.....	New York Central.....	.....	555	23,067,400	14,763,897	7,707,348	3,609,481	3 pr. ct. 6m
936,000	7			1873	1st mortgage.	.....	"	.....	.....	.....	.....	.....	.....	.....
411,700	6			1864	2d "	.....	N. Y. & Harlem R. R.	.....	123	5,717,100.00	.....	1,040,393.26	64,678.71	\$37,692.30
500,000	7			1863	1st "	.....	" Pref.	.....	.....	.....	.....	.....	.....	.....
300,000	6				1st "	.....	N. Y. Prov. & Boston..	.....	50	1,58,000.00	.....	245,713.00	51,544.40	.....
					2d "	.....	N. Lon. William'tu & Pal.	.....	66	1,700,000.00	.....	120,571.50	.....	\$25,000
					2d "	.....	"	.....	.....	.....	.....	.....	.....	.....
1,500,000	6				1st mortgage.	.....	Pontchartrain R. R.....	.....	5	500,000.00	.....	.....	.....	.....
1,000,000	6			1873	1st mortgage.	.....	N. O. Opelosa & Gr. West.	.....	62 1/2	6,00,000.00	.....	116,795.00	366,118.50	7 pr. ct.
2,000,000	6			1873	2d "	.....	N. Y. & New Haven..	.....	103 1/2	3,000,000.00	.....	1,007,666.48	.....	2 pr. ct. 6m
1,500,000	7			1-85	3d "	.....	North Western Va. R. R.	.....	.....	.....	.....	.....	.....	7 pr. ct.
3,000,000	5			1859	1st mortgage.	.....	"	.....	.....	.....	.....	.....	.....	.....
419,300	6			1877	1st mortgage.	.....	Northern (N. Y.) R. R.	.....	118	2,000,000.00	.....	600,000.00	.....	.....
221,800	6			1860	"	.....	North Missouri R. R.	.....	19 1/2	.....	.....	23,176.54	88,458.56	2 1/2 pr. ct.
					"	.....	Norwich & Worcester R.R.	.....	60	2,111,500.00	.....	304,236.33	.....	.....
400,000	6				1st mortgage.	.....	Ogd'sh'b'e, Clay't'n & Rome	.....	94	.....	.....	289,690.10	137,875.93	5 pr. ct.
1,300,000	8			1866	2d mortgage.	.....	Ontario, Simcoe & Huron	.....	88 3/4	2,957,500.00	.....	276,539.02	.....	.....
300,000	7			1875	1st "	.....	Orange & Alexandria R.R.	.....	.....	.....	.....	.....	.....	.....
300,000	8			1873	1st "	.....	Peoria & Bureau Val. R. R.	.....	47	1,500,000.00	.....	.....	.....	6 pr. ct.
350,000	6				1st mortgage.	.....	"	.....	.....	.....	.....	.....	.....	.....
800,000	7			1861	1st mortgage.	.....	Philadelphia & Trenton..	.....	28 1/5	1,000,000.00	.....	.....	.....	.....
1,260,000	6			1864 to 1874	1st "	.....	Portsmouth & Concord..	.....	47	.....	.....	.....	.....	.....
				20 years.	1st mortgage.	.....	Potsdam & Watertown..	.....	76	2,000,000.00	.....	68,525.42	.....	.....
					1st mortgage.	.....	Rufand & Washington..	.....	62 1/2	950,000.00	.....	.....	.....	.....
					1st mortgage.	.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00	.....	.....	.....	.....
					1st "	.....	Salem & St. Louis R. R.	.....	168 1/2	400,000.00	.....	.....	.....	.....
					2d "	.....	Snd'sky, Mans'd & New'k	.....	116	.....	.....	.....	19,050.64	.....
					2d "	.....	Sullivan Railroad.....	.....	26	500,000.00	.....	75,246.06	17,378.08	.....
					1st mortgage.	.....	Tennessee & Alabama..	.....	145	.....	.....	39,586.44	.....	11m. 12 pr. ct
					1st mortgage.	.....	Terre Haute & Richmond	.....	73	1,294,450.00	.....	.....	.....	.....
					1st mortgage.	.....	Toledo, Wabash & Western	.....	242	.....	.....	.....	.....	.....
				1861	2d "	.....	Troy & Boston.....	.....	.....	1,000,000.00	.....	.....	.....	.....
				1840	3d "	.....	"	.....	.....	.....	.....	.....	.....	.....
				1875	3d "	.....	"	.....	.....	.....	.....	.....	.....	.....
					1st, 2d, 3d "	.....	Vicksburg & Jackson....	.....	46	.....	.....	322,048.60	165,076.04	2 pr. ct.
					1st mortgage.	.....	Virginia & Tennessee..	.....	215	3,000,000.00	.....	.....	.....	.....
					1st mortgage.	.....	Westchester (Pa.) R. R.	.....	31	165,000.00	.....	.....	.....	.....
					2d "	.....	Wilmington & Manchester	.....	171	.....	.....	.....	.....	.....
					1st mortgage.	.....	Winchester & Potomac..	.....	32	.....	.....	.....	.....	.....
					2d "	.....	Worcester & Nashua....	.....	45 60.	.....	.....	.....	.....	.....



## LONDON QUOTATIONS

OF

## AMERICAN STOCKS AND BONDS.

July 31st, 1857.

Belvidere, Del., guar. 1st mort. conv. —	@ 88
Chicago & Rock Island, Mort. conv. 1858, —	—
Chn. Ham & Dayton, 2d mort., —	80
Detroit & Milwaukee, 1st mort., conv. till 1865, —	60
Erie, 3d Mortgage, 1853, —	78
" Sinking Fund, —	73
" conv. 1862, —	62
Grand Trunk (Canada) Dehture, —	87
Great Western " conv., —	107
" " non-conv., —	109
Illinois Central, 1st Mort., 7 1/2, —	87
" " with option 70 per cent., —	103
Joliet & Nor. Ind. Gua. Mich. Cent. & Ill. Cent., —	82
Little Miami 1st Mort. not conv. 6's, —	—
Marietta and Cincinnati, 1st Mort., —	—
Michigan Central, conv. 8's, 1860, —	90
do do 1859, —	90
N.Y. Cent. & N.J. Not conv. 6's, —	80
" " conv. 7's, —	89
Ohio and Mississippi, 1st Mort., —	—
Ohio and Pennsylvania, Income 1872, —	65
Panama. No mort. conv. 1860, —	—
Pennsylvania, 1st Mort. conv., —	86
" " Sterling, 2d Mort., —	90
Steuersville and Ind., 2d Mort., —	—

The quotations given are sterling quotations. The American value is to be obtained by adding on exchange generally about 10 per cent

## MONETARY AND COMMERCIAL

The past week has been one of the most intense excitement in the financial world. The condition of the city banks here is about the same as at our last dates. The suspended banks are still suspended, with no immediate prospect of re-opening. The Ohio Life Insurance & Trust Co. has made an assignment to the Directors. Three of the Directors refused to act in the matter, and are in no way connected with the assignment. The committee who went to New York to investigate the affairs of the New York office, have reported that after a month's hard labor they have made no progress in their investigation that would warrant a report. It is also stated that the complication of the books has mainly taken place since April. Such a state of things is unpardonable, and it is much to be regretted that there is no law which would promptly place the delinquent officers in a place where they would be sure to learn to do some duties well and promptly.

On Saturday night alarm was caused by the news that the banks of Baltimore, Philadelphia and Pittsburgh had suspended specie payment. It was feared that the banks of Boston and New York would follow. It was generally believed that a total suspension throughout the country would be inevitable, and the sooner it took place the better for the general interests.

The Board of Control of the State Bank of Ohio, at a meeting held at Columbus yesterday,

Resolved, That the banks of the State of Ohio have the ability, and will continue specie payment, regardless of whatever course may be taken by the banks of other States.

We have condensed the following statements of the condition of banks in other States, from the latest returns:

The following statement will show the transactions of such of the banks of this State as have accepted the provisions of the Act of December 18th, 1849, in Discounts, Deposits, Specie and Circulation for the month of August, 1857.

Banks.	Discounts.	Deposits.	Specie.	Circ'n.
State S. Carolina	1,796,191	494,260	125,449	1,163,577
Br. B'k nt Colu'a	1,004,294	234,757	3,615	..
Br. B'k at Camden	298,980	15,525	2,893	..
S. W. R. Bank	588,266	272,659	39,011	223,455
Pl. & Mech's Bank	664,934	194,620	88,127	171,835
Union Bank	649,472	175,442	76,570	190,475
State Bank S. Ca'a	400,566	207,024	70,453	312,515
Bank of S. Carolina	873,278	276,862	23,569	99,240
Bank of Charleston	1,878,935	385,502	298,026	843,524
Far. & Ex. Bank	698,732	78,307	74,631	682,520
Bank of Hamburg	179,200	51,392	90,352	671,521
Com. Bank, Col'a	650,608	269,972	76,156	265,130
Bank of Newberry	24,436	48,886	43,952	546,153
Pl. Bank, Fairfield	87,465	20,621	24,000	366,670
Exchange B'k, Col'a	347,929	165,711	35,256	509,477
Mech. B'k, Cheraw	143,235	10,076	27,647	265,635
Bank of Chester	131,658	62,812	38,358	388,575
Bank of Camden	214,423	21,405	12,508	167,233
Peoples' Bank	267,251	102,633	65,713	418,310
Bank of Georgetown	174,619	70,780	27,718	240,680
Total .....	11,116,623	3,059,276	1,252,058	7,625,877

The annual report of the Bank Commissioners for May,

1857, shows the progress of banking in Connecticut for the past ten years, the leading aggregates of which are as follows

Year	Capital.	Circulation.	Specie.	Loans.
1848	\$8,726,000	\$4,291,000	\$517,000	\$13,424,000
1849	8,995,000	4,511,000	575,000	13,740,000
1850	9,907,000	5,352,000	640,000	15,607,000
1851	10,575,000	6,639,000	774,000	18,100,000
1852	12,509,000	7,118,000	825,000	20,552,000
1853	13,950,000	11,217,000	1,259,000	27,833,000
1854	15,641,000	11,207,000	1,206,000	27,397,000
1855	17,145,000	6,833,000	812,000	23,999,000
1856	17,852,000	9,197,000	1,006,000	27,201,000
1857	20,505,000	9,090,000	1,121,000	32,639,000

From this tabular return it will be seen that the circulation is much reduced since May, 1853-4, and that it is now no more than is actually required for the wants of such an active people. Besides, the specie on hand in their vaults they maintain bank balances, equivalent to specie funds at Boston and New York for the redemption of their bills.

The condition of the Banks in New Hampshire on the 1st of this month is represented in the following aggregates:

Capital paid in .....	\$4,041,000
Individual Deposits .....	4,101,000
Circulation .....	3,469,000
Total .....	\$8,611,000
Loans .....	\$8,731,000
Specie in vaults .....	296,000
Bills of other banks .....	143,000
Deposits in Boston, &c., for redemption of Circulation .....	235,000
Total .....	\$9,935,000

THE BANKS OF TENNESSEE.—From the official statements of the several banks of the State, showing their condition on the 1st of July last, we have prepared the subjoined table, exhibiting the amount of capital paid in by each, the circulation, the deposits, specie, amount of bills due from other banks, domestic bills, and the amount of notes under discount. The following recapitulation may be of service to the reader:—

Whole amount of capital paid in .....	\$9,076,360
" " circulation .....	6,351,321
" " deposits .....	4,353,301
" " specie .....	2,636,537
" " due from other banks .....	2,922,578
" " bills discounted .....	3,891,083
" " notes .....	7,590,186

The foregoing aggregates may be divided as follows:—

	The Three Old Banks.	Other Stock Banks.	Free Banks.
Capital .....	\$6,491,349	\$1,123,711	\$1,462,300
Circulation .....	3,964,824	1,093,330	1,193,067
Deposits .....	2,346,650	277,441	1,731,210
Specie .....	2,014,272	359,005	283,155
Due from banks .....	2,043,672	249,899	630,607
Bills discounted .....	2,663,312	621,449	606,322
Notes .....	4,848,900	1,083,514	1,537,772

Six of the Free Banks—the Banks, namely, of Knoxville, Memphis, Paris, Taxewell, Claiborne and Trenton—have not reported. Their capital and circulation, however, may be very nearly arrived at by reference to the number of State Bonds they have on deposit with the Comptroller of the Treasury, which is as follows:

Bank of Knoxville .....	\$67,000
Bank of Memphis .....	50,000
Bank of Paris .....	50,000
Bank of Taxewell .....	135,000
Bank of Claiborne .....	145,000
Bank of Trenton .....	54,000

The law provides that the amount of bonds deposited shall exceed the amount of notes issued 10 per cent.

A friend has prepared and handed us the following:—

Comparative statement of the strength of all the banks in Tennessee, on the 1st of January and 1st of July, 1857.	
January 1, Specie held .....	\$2,325,823
July 1, do .....	2,670,751

Increase of Specie .....	\$344,928
Jan. 1, Circulation of all Tennessee banks, .....	\$9,021,475
July 1, do .....	6,036,982

Decrease of circulation .....	\$2,984,493
Jan. 1, Deposits .....	5,151,256
July 1, do .....	4,545,104

Decrease in deposits .....	\$606,152
----------------------------	-----------

## SUMMARY.

Increase of specie .....	\$344,928
Decrease of circulation .....	2,984,493
Decrease of Deposits .....	606,152
Total .....	\$3,935,573

Showing the banks to be \$3,935,573 stronger July 1st, than January 1st.

Since the 1st of July the circulation has continued rapidly to diminish, inasmuch that it can hardly exceed now \$5,000,000. It would probably fall under that amount.

Discounts in Cincinnati are at a stand still. The regular houses are doing nothing, and the few outside transactions that we hear of are at rates ranging from 1 to 4 per cent. per month. Exchange on New York is at 5 per cent. premium, and gold 5 to 10 per cent. In stocks no legitimate transactions have taken place.

Holders are only selling from necessity, and buyers are only operating because they see large speculations in the necessities of others.

We subjoin our usual quotations from Hewson & Holmes' circular:

We have, since the 2d inst., suspended our weekly circular, for the reason that in the excited condition of our money market, consequent on the failure of the Ohio Life Ins. & Trust Company, followed by that of the Central and Citizens' Banks of this city, securities of all classes were neglected to such an extent that it was impossible to give reliable quotations, or to impart to our correspondents any information in regard to the value of securities usually sold in this market. Since the failures alluded to, the commercial and financial revulsion, commencing with the Trust Company disaster, has increased in intensity, and has rapidly widened and extended its influence, until it now includes among its victims all the banks of Pennsylvania, Maryland, Wheeling, and many banks in other sections of the country. Mercantile failures have also become so frightful in number, embracing many houses of the highest respectability, that confidence seems to be entirely gone. In the state of alarm and distrust produced by this condition of matters, the produce of the country remains in the hands of the farmers, from whom it is not likely to be drawn until matters become more settled; meanwhile all the mercantile classes are rapidly coming to the conclusion that the only hope for and escape from more serious disaster, is in the general and early suspension of specie payments by all the banks of the country outside of New York city. This, it is supposed, will give immediate relief, and had better occur now, while the banks are comparatively strong, and not after they shall have exhausted all their coin in fruitless efforts to sustain themselves.

The rate of exchange on New York is to-day 5 per cent. premium, at which but small amounts can be had. With exchange at this rate every Eastern bank note in circulation in the West will return, in the shape of mercantile remittances; while the Western banks now paying specie, must expect to retire a large part of all their circulation. To do this these banks will be compelled to reduce rapidly their discount lines, and to withhold entirely from their customers the accommodations which they have hitherto received, and on which they rely for the maintenance of their credit and prosecution of their business. Such a course would inevitably cause disasters and bankruptcies that it is fearful to contemplate. A suspension of specie payments will enable the banks to furnish the necessary facilities to move the wheat, rye, &c., to which will soon be added the corn, cattle and hogs. The shipment of these to the seaboard would create exchange, and the West would be daily strengthening in every department of trade.

In the existing state of matters, stock securities are much neglected; but still there has been numerous exchanges of deposits in the suspended banks for railroad securities, which, when reduced to cash, indicate a much firmer state of feeling and better prices than the circumstances seem to warrant. The transactions during the panic embrace Little Miami Railroad shares at 75 to 80; Columbus & Xenia at the same rate; Hamilton & Dayton shares at 50 to 55; Indianapolis & Cincinnati at 50; Covington & Lexington at 15; and Ohio & Mississippi at 9 to 10; Farmers' Bank of Ky. stock at 105. In bonds we note sales of Little Miami 6 per cent. 1st mortgages, equal to 75; Hamilton & Dayton 7 per cent. 1st mortgages, at 80, and 2d mortgages at 70; Indianapolis & Cincinnati 2d mortgage 7 per cents at 70; Ohio & Mississippi Construction Bonds at 35 to 40; Covington & Lexington Income 10 per cents at 50.

In money matters, for the sale of paper we have rates varying from 2 to 5 per cent. per month, according to the character of the paper and the necessities of the borrower. Transactions are very few and it may be said to be impossible, in a general way, to sell what in ordinary times would be considered good signatures.

The Trust Company, after cancelling about three and a half millions of her indebtedness, made an assignment on the 27th inst. to seven of her trustees, since when, checks on her have very materially declined and may now be quoted at 30 to 35.

The Central and Citizens' Banks are rapidly reducing their indebtedness, by exchanging their Bills Receivable for Checks on themselves. These may be quoted at 75 for checks on the former and 80 to 85 on the latter.

The banking houses of this city are receiving on deposit the notes of the State Bank, Ind., and the Bank of the State of Indiana, Kentucky Banks, State Banks of Ohio



generally, and Banks of Louisiana. Coin is selling at 5 to 10 per cent premium over current bank notes, with very little to be had. JEWSON & HOLMES.

SALES AT THE NEW YORK STOCK BOARD—Sept. 29.

\$1,000 Ohio State 6's, '60	85
5,000 Ohio State 6's, '66	92
1,000 Virginia 6's	73
1,000 Missouri State 6's	63
5,000 Tenn. State 6's, '90	75
5,000 N. Y. Central 6's	64
1,000 Hudson Riv. R. R. 1st Mort. Bonds	90
3,000 Harlem R. R. 1st Mort. Bonds	55
2,000 Galena & Chicago R. R. 2d Mort. Bonds	75
1,000 Chicago & Rock Island R. R. Bonds	84
115 shares New York Central	60
5 " Del. & H. C. Company	101
100 " Penn. Coal Co.	63
200 " Cumberland Coal Co.	6½
15 " Pacific Mail St. Co.	64
100 " Erie	12
300 " Reading	31½
50 " Mich. Cent.	45
50 " Mich. S. & N. Ind.	16½
27 " do do do pref.	34
200 " Panama	70
5 " Cleve. Cul. & Cin.	75
550 " Cleveland & Toledo	30
100 " Chicago & Rock Island	63
72 " LaCrosse & Milwaukee	6

DELAWARE, LACKAWANNA AND WESTERN RAILROAD.—An adjourned meeting of the Stockholders and Bondholders of this Company, was held at their office, No. 51 Wall street, yesterday afternoon. The Committee appointed at the previous meeting to take into consideration the situation of the Company, and present a plan for relieving it from embarrassment reported progress, and requested further time to perfect such plan. A meeting of some of the principal creditors of the Company was convened by the Committee on Saturday, but in consequence of the shortness of the notice, only a limited number were present. From all we can learn the creditors are more interested in this matter than any other class. The Stock and Bonds are mostly held by the same individuals; consequently, if the Road should pass into the hands of the bondholders, the creditors would be the principal sufferers. The amount of floating debt is, in round numbers, \$1,500,000, of which some \$900,000 is secured by collaterals, leaving about \$600,000 unsecured. A portion of the preferred debt has been settled by a sale of the stock of Coal on hand at Elizabethport and Jersey City, and for securing the balance a lien has been given to those creditors upon all the personal property of the Company situated in the States of Pennsylvania, New Jersey and New York, subject only to the payment of the employees of the Company.

BATAVIA & ATTICA R. R.—The proposition to construct a new road from Batavia to Attica, and thus connect the Buffalo and Corning with the Hornellsville road, meets with a warm opposition from the bondholders of the latter; as the result would be to render useless the track from Attica to Hornellsville. There are first mortgages on that section to the amount of \$700,000, and on the Buffalo and Attica section \$500,000. A committee of ten bondholders have issued a circular remonstrating against any such coalition, the concluding paragraph of which holds the following language:

"To the pure and simple bonaholder of the Buffalo and New York City Railroad Company, and without interest in the Corning Railroad, we ask investigation into the relative position of this present route and that proposed to be created; the basis or stock and debt in each; the revenue likely to accrue from each—that they may determine whether their interest is not best served by

selling the road as a whole, and owning in common as a united property. Certain it is, that neither class of bondholders would have loaned their money, had it been demmed possible that under foreclosure, this work could have been sold in separate parts; a consideration that each bondholder will feel the full force of, when looking impartially at the subject. We hope that the bondholders secured by the Buffalo section will take action by the appointment of a Committee like our own, so as to consider, weigh and determine the mutual interests of both sections. Having given to the subject some consideration, we can see no sound ground why the bondholders should join in dividing this road, for the sake of embarking their property in a new project represented by a capital so much larger than that likely to represent the present organized line, and that too when the present line is preferable to the Corning line, to complete which an expenditure of not less than \$400,000 perhaps \$500,000 will be necessary between Attica and Batavia."

THE TEHUANTEPEC RAILROAD.—The steamer Texas arrived at New Orleans September 26th, and brings latest dates from Vera Cruz. The grant of the new Tehuantepec Company requires that ten leagues of the railroad shall be finished every year after the 7th of September. It also requires the completion of the dykes at Coatzacoalcas and Ventosa.

NORTH-EASTERN R. R., N. C.—The Pennsylvanian says: We understand that the North-eastern Railroad, in North Carolina, will be so far completed as to connect with the Wilmington and Manchester Railroad on Monday, the 5th of October next, by which a new and much desired route—not only for Charleston, in South Carolina, but also for lower Georgia and Florida—will be opened for the daily transportation of freight and passengers. The connection on the Wilmington road will take place at Florence—a station on the Wilmington and Manchester road, 107 miles from Wilmington. The opening of this route will reduce the time between Philadelphia and Charleston to about forty-five hours; but this is not the only advantage that will be afforded to travelers going south. Passengers on arriving at Charleston, three times a week—Mondays, Wednesdays and Fridays—by this new and expeditious route, will be immediately transferred, free of charge, to a first class steamer, which will be in readiness to convey them to Savannah, where they will arrive the next morning in time to connect with the train on the Central Georgia Railroad for Macon and the West; with the train of the Savannah, Alabama and Gulf Railroad for South Georgia, and with the line of steamers for the interior of Florida. The completion of the North-eastern Railroad to Florence, and the connection secured which we have mentioned, will be of inestimable value to the city of Charleston, restoring, in all probability, a profitable travel which it once enjoyed in the days of the Wilmington steamers, but which it has lost, in some degree, since the opening of the Wilmington and Manchester Railroad.

TOLEDO AND DETROIT ROAD OPEN.—This important line of Railroad is now open for travel. The first passenger train came through from Detroit to Toledo on Tuesday morning. The running arrangements will be made public soon.

RAILROAD BRIDGE AT KILBURN CITY.—The Kilburn City Mirror says, that the high pier for the bridge over which the La Crosse and Milwaukee Railroad is to cross the Wisconsin River, is completed, and the superstructure of timber is now being erected. The Mirror thinks that the cars will pass over in about three weeks.

FOX RIVER VALLEY RAILROAD.—THE CONTRACT LET.—The Directors of the Fox River Valley Railroad Co., have let the contract for their whole line, on what are esteemed to be very favorable terms, to Messrs. QUALEY & Co., who have an excellent standing as reliable men, and are already supplied with the necessary equipments. The contract gives to the 1st of October, 1858, for the completion of this important line, which cannot fail to add largely to the business of our city.

BAY DE NOQUET AND MARQUETTE RAILROAD SURVEYS.—The corps have come in from Bay de Noquet; having finished their first line through between the two termini.

The points developed, so far, are substantially these:

1. The country between this part of the south shore of Lake Superior and Bay de Noquet is a tolerably high plateau or table land.

2. The descent from this plateau is somewhat sudden towards each water; but not so much so as to make moderate grades difficult or costly.

3. The plateau itself is very smooth on top, along the line as located. There are scarcely any ridges or ravines traversing it. Consequently the earthwork will be light and the mechanical structures few and cheap.

4. The alinement itself after gaining this table land, will be very simple and direct—tangents of good length—curves few and easy.

It will be not simply cheap to build, but cheap to operate after it is built. This is on account of the lightness of the grades, and the small number of bridges, culverts &c., to be kept in repair.

The engineers will take the field again directly to determine the best place for gaining the height of land described above.

BUFFALO & LAKE HURON RAILWAY.—At a meeting of the Board of Trade, held yesterday afternoon at their rooms in the Merchant's Exchange, the President, Geo. S. Hazard, Esq., in the chair, the following preamble and resolutions offered by S. H. Fish and seconded by S. S. Guthrie, were unanimously adopted:

WHEREAS, The Buffalo and Lake Huron Railway Company propose to construct a dock for the landing of their ferry boat, and a swing bridge across Black Rock Harbor at or near the foot of Connecticut street, and to extend the said railway into the city of Buffalo from that point, by authority of certain grants from the State of New York, and have made application to the War Department of the United States for permission to cross the land owned by the United States lying between the Niagara River and block 133; Therefore

Resolved, That in the opinion of this Board the proposed works are absolutely necessary; that the railway will be of no value to the company without this extension, and facilities for transporting their freight and passengers across the Niagara River and into the city of Buffalo; that the construction of said works will not in any manner interfere with any public or private interests; that the completion of the said railway is a matter of great importance to the commercial and business interests of the city of Buffalo.

Resolved, That the Board of Trade respectfully petition the War Department at Washington to grant permission to the Buffalo & Lake Huron Railway Company to lay a railway track from the Niagara river to the north line of block 133, across the land ceded to the United States for military purposes, by an act of the Legislature of the State of New York, passed in 1842.

Resolved, That the Secretary of the Board be and is hereby directed to send a copy of the above preamble and resolutions, under the seal of the Board, to the Hon. Secretary of War at Washington.



[From the Boston Advertiser, Aug. 28.]

# MISCHIEF OF THE NEW YORK SYSTEM OF ALLOWING INTEREST ON DEPOSITS.

There are the best reasons in the world why the explosion of several moneyed houses in New York should meet with no answering echo in this city. It is gratifying to see the solid confidence with which bank stock is now sold in State street. A few shares in the Boylston bank were sold on Wednesday by order of executors (otherwise they probably would not have come upon the market), and commanded a premium of \$17 per share.—There are no signs of a panic here, and there is no reason why there should be.

We have great cause for congratulation at such moments as this, that our banks are prohibited by law from paying interest on deposits. A different course prevails in New York, and is the fruitful source of just such mischievous results as have recently been developed. The banks in the city of New York are anxious to secure deposits of money, even if they pay say 4 per cent. interest on amounts less than \$5,000, and 5 per cent. on larger amounts. They think this is a profitable business, because they expect to loan the money again at a higher rate of interest. The offer appears tempting to individuals who happen to have money on hand awaiting investment. More particularly country banks are allured by this promise of interest to deposit with banks in the city of New York all the funds which they do not require for immediate use. They are even solicited to do so by circulars sent out by the city banks. Such country banks, at particular times, of course have on hand a considerable fund after they have discounted as many notes as they dare, and it seems to be a harmless act to put this money in New York where it will draw interest, rather than to let it lie idle in their vaults. It can be recalled from New York, it is supposed, at any moment, when it is needed for the redemption of bills. The city banks, in thus appearing as borrowers, go beyond the line of their legitimate business.

So far the practice is bad enough; but it is worse in the next stage of its consequences. The New York city banks, by their successful solicitations for these deposits, find themselves possessed of a considerable amount of funds on which they are paying four and five per cent. interest. They, on their part, like the country banks, dare not use this money in discounting notes with even a short fixed period to run, for they know that it may be recalled at any moment by the depositors. So they are very glad to loan the funds to brokers on demand, taking any sort of security that may offer. They begin a second series of solicitations to find borrowers outside the ranks of their regular customers.

The third stage of the business, accordingly, witnesses brokers without any substantial means, invited and tempted by the banks to borrow their spare funds, on demand, at 7 per cent. interest. The brokers give some sort of railroad shares as security, and enter into speculations with the money they have thus obtained. When their speculations fail, the security which they have offered must be pressed upon the market—it of course proves unavailable to cover the debt, whereupon the bank goes down, and the unsuspecting depositor loses his money. Here we see a common cause for the nearly simultaneous failure of three distinct classes of operators. The recent events in New York have precisely illustrated this effect of the system.

The whole difficulty arises from too great

eagerness to make money productive. Their balance of spare funds is turned over by the country bank to the city bank, and by the city bank to the brokers, in the hope of getting a little larger rate of interest at each turn, when it ought to be retained by the country banks in the first place, unless it can be employed by them in the legitimate business of their own locality. When their loan has reached the legal limit they can afford to forego the precarious profit of interest on the temporary balances remaining in their hands. And as for deposits on interest made by individuals, a man who makes such a deposit simply relieves himself of the trouble of seeking an investment for his money, by throwing it upon the bank. If he knows of certainty that the bank is managed more prudently than he can manage his own business, he is wise to trust it, and not otherwise.

It is obvious that the acting cause in this mischievous series of operations lies with the city banks who offer interest on deposits. They tempt depositors on the one hand, and borrowers on the other, into an operation which is inherently dangerous. There would be little opportunity for brokers whose resources of cash are scanty, but who are rich in fancy stocks, to enter into speculations if the city banks did not invite them to borrow money on demand, giving their stocks as security. And there would, of course, be no inclination for country banks or for individuals to send their funds to New York "for safe keeping," (this is really a singular phrase to describe the thing), if they were not tempted by the allurements of a promise of interest on their deposits—a promise necessarily founded on an unsubstantial basis. Accordingly the evil, in both its phases, would be prevented if the New York banks should discontinue borrowing money and paying interest.

Our more cautious legislators in Massachusetts have understood this principle, and have prohibited the banks of this Commonwealth from issuing notes payable at a future date, or with interest, with a few justifiable exceptions. The law, it is true, permits interest to be allowed upon deposits made in one bank by another; but the practice of our Boston banks is such as to prevent any mischief from this cause. The Suffolk Bank, for instance, refuses to pay interest to the country banks whose bills it redeems; and, although this seems a harsh regulation, it is undoubtedly a salutary one. Out of \$7,000,000 of deposits in the Boston banks, according to the latest detailed return (October, 1856), only little more than half a million (viz: \$586,579) bore interest. Twenty-six out of the thirty-six banks of Boston had no deposits whatever on which they paid interest. The spirit of the law is thus executed with greater fidelity than the letter requires.

The banks of New York city, by following another practice, have entered a sea where they are likely to be wrecked and to drag down their customers on both sides. So soon as the great body of New York business men shall see this evil, and shall prevail with their State Legislature and with the managers of the banks to prohibit it, by the simple expedients employed in Massachusetts, we may look for a better state of things. Meanwhile we need not be surprised to hear of the failure of banks in the city of New York, together with the misfortunes of brokers who borrow and country banks who lend, while stock in Boston banks commands seventeen per cent. premium. There is a good reason for the difference.

**MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD.**—At a meeting of the Stockholders of this road, held at Adrian, Michigan, on Sept. 25, the following gentlemen were elected Directors of the road. John B. Jarvis, Samuel W. Comstock, Clarkson N. Potter, Robert L. Oliphant, all of New York City; George Bliss, of Springfield, Mass.; John C. Wright, of Schenectady, N. Y.; R. S. Burrows, of Orleans Co., N. Y.; John S. Prouty of Geneva, N. Y.; Ransom Gardner, of Detroit, Mich.; Schuyler Colfax, of South Bend, Ind.; Hiram Sibley, of Rochester, N. Y., and Wm. Wolcott, of Utica, N. Y.

Resolutions were passed expressing entire confidence in the direction of the road, and the belief that by proper management it can be made to pay fair dividends. Also, ordering the General Office to be removed to some point on the line of the road.

## Locomotives and Passenger Cars FOR SALE CHEAP.

1 LOCOMOTIVE, made at the Boston Locomotive Works, four and one-half feet driving-wheels, in good running order.

1 Locomotive, made at the New Jersey Locomotive Works, twenty-four tons, five feet driving-wheels, sixteen by twenty-four inch cylinder.

3 Passenger Cars, for sixty passengers; one has never been used, and the others only for a short time.

The two Locomotives and two of the Cars are at Lexington, and one car at Maysville, Ky., and can be seen on application to W. M. Whittlesey, at the former, and A. M. January, at the latter place.

The above will be sold very cheap for cash or short approved paper. For further information apply to

CAMMANN & CO.,  
oc1-4t No. 56 Wall street, New York.

## PERU & INDIANAPOLIS R. R.



Per Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lago, Huntington, Wabash and Toledo; also Logansport and Latayette.

Passengers coming South from T. W. & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Frtght. Ag't.  
Indianapolis, Sept. 16, 1856. [mh29-1v.

## To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road; commencing at Grayville, on the Great Wabash River, in White county, and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 53 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
feb19-1m 9 South William street, N. Y.



## The Polytechnic College of the State of Pennsylvania.

WEST PENN. SQUARE.

The Polytechnic College, incorporated by the Legislature, 1853, on the plan of the Industrial Colleges of Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

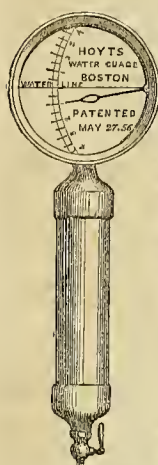
Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to DR. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia.

Aug. 20-6t

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

js30

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

js23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**Patent Self-Adjusting Lantern!**  
THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by

GRAY, HEMMINGWAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-1y 119 Walnut st., Odd Fellows' Building.

## FOR SALE,

EIGHT ACRES OF LAND on Lick Run, about half a mile west of the city, known as the Harrington property, and which may be superior for a Brewery. Inquire at J. T. CRAPSEY'S Law Office, Northwest corner of Walnut and Sixth streets, No. 14 Bacon's Building. jy9-2m

## SAFETY & ECONOMY.

JAMES HARRISON JR'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

**PATENTED APRIL, 1856.**

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to

JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 2d street, N. Y.

F. W. RHINELANDER.  
JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

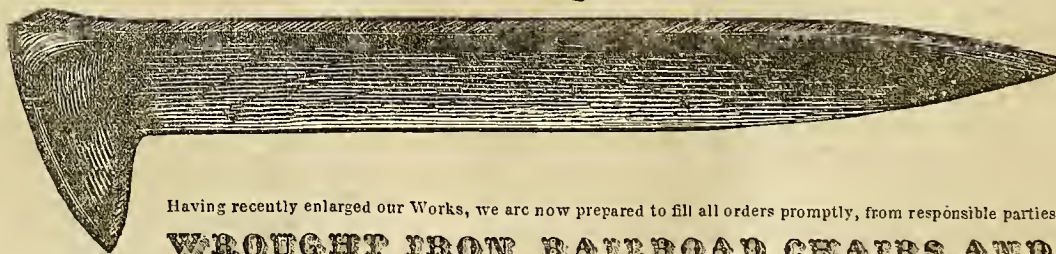
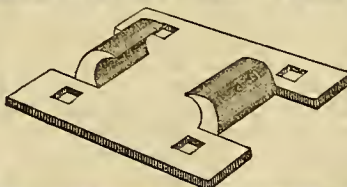
Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

## CINCINNATI WROUGHT-IRON

# RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20-1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



# Most Direct Route to the East. BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and  
Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH  
PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA AND NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

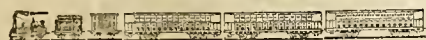
Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,  
Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
Office, Adams Express Co., Third street.

# Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Supt Terre Haute & Richmond R. R.

## PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Settling Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1856.

# LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.  
THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via, Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via, Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

3717

H. B. RUGGLES, Conductor.

# TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

# OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

Freight.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.  
If Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L. Office No. 2 Burnet House.

1856. 1857.

Summer Arrangement.

1857.

# Cincinnati, Hamilton & Dayton [TRUNK LINE.]



# RAILROAD,

FOR THE

# NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPOUT,  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Cuydo for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and sepper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

# Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

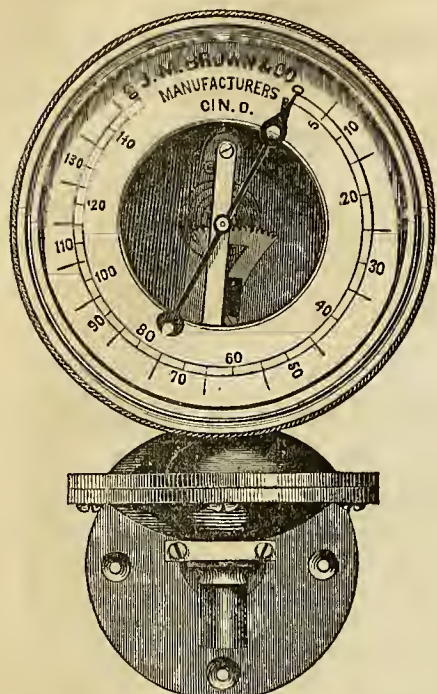
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES  
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artisan wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.



Frank T. Foster,  
Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy. 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

### MORRIS, TASKER & CO.,

Manufacturers of  
LAP-WELDED BOILER FLUES,  
1 1/2 to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,  
From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

LOCOMOTIVES.  
4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. H. GOODMAN & CO.,  
Feb. 7, '66-2m. No. 7 Wall st., N.

## RAILROAD CAR

AND  
COACH TRIMMINGS.  
DOREMUS & NIXON  
No 21 Park Place, and 18 Murray st.,  
NEW YORK,  
IMPORTERS

OF  
Plain and Figured Mohair Plush.  
Printed & Unent do., Entirely New Designs;  
MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars  
ROPE MATTING, Every Width.  
Oil Cloths for Head Linings, Enameled with Gold and Silver;  
DUCK CANVASS FOR CAR ROOFS;  
Push Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

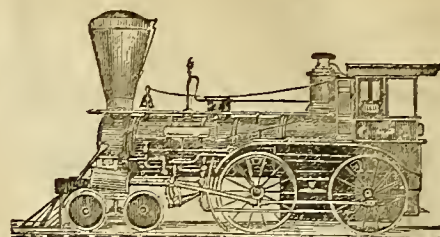
PATENT FELT.  
FOR CUSHION & MATTRASS FILLING  
N. B. We have the Plush in bond for exportation.  
sep18 DOREMUS & NIXON

W. G. ATKINSON,  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap. 20 MOORE & RICHARDSON.

## Railroad Car Findings BRIDGES & BROTHER,

64 Courtlandt Street, New York.  
Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

LOCOMOTIVE ENGINE LANTERNS  
From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

ENAMELLED HEAD LININGS  
Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Kocks and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Belts, anti-friction or Bahhitt Metal.

Portable Forges and Jack Screws.  
Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,  
Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.  
ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
†oc6.

GEO. D. WINCHELL & BRO.,  
172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

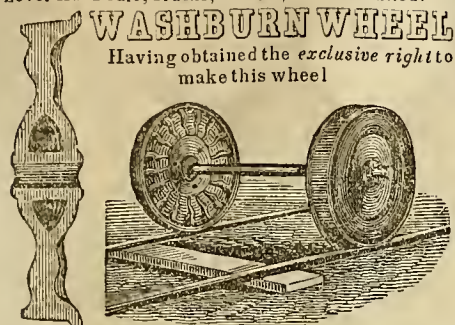
Orders thankfully received and promptly filled at the lowest rates.

1 LIVER MEAL. (The highest prize) awarded to here pumps steam Pumping Engine, etc. etc. etc. Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati.— Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Levor Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for ears fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.,

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,  
Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

**Railroad Tools,**  
India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing,  
Miller's, Radley & Hunter's, Porter's, Williams', and  
others

**LOCOMOTIVE HEAD-LIGHT,**  
Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
dlesticks, Brass and Tin Globe and Egg Guarded

**LANTERNS,**  
Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

**Steam and Water Gauges,**  
Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

**STEAM WHISTLES,**  
Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

**WASTE.**  
Baggage Barrows and Cheeks, Freight Trucks,  
**CAR FINDINGS,**

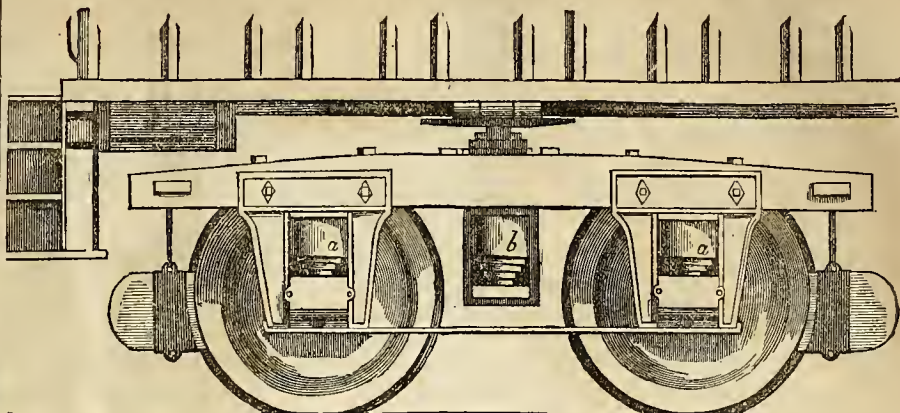
Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to all orders received, and will see that they are in proper condition, and that they are forwarded with promptness and care.

ORDERS SOLICITED AND PROMPTLY  
FILLED.

oc23-ly

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to RICHARD VOSE, Secretary, N. Y.

J. DAVENPORT . . . M. D. WELLMAN . . . C.

**DAVENPORT, RUSSELL & CO.,**

**Railway Car Manufacturers,**  
**MASSILLON, OHIO.**

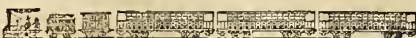
THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th\* JOSEPH DAVENPORT.

**MUSKINGUM WORKS**  
**ZANESVILLE, OHIO.**



**DOUGLASS, SMITH & CO.**

WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville.

They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description,  
Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

**CAR WHEEL.**

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

**WASHBURN WHEEL,**

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

**BOLLMAN'S PATENT IRON & WOOD BRIDGE.**

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

DOUGLASS, SMITH & CO.,  
Muskingum Works, Zanesville, O.

**S. C. THOMSON & CO**

MANUFACTURERS OF

**PATENT PAD LOCKS,**

For Railroad Switches, Merchandise Cars

Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1 n2+ NEWARK, N. J.

**Racine and Mississippi Railroad.**



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Zanesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President,  
Robert Harris, Sup't.  
Racine, May 15, 1857.

**Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.**

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 17] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,

Consulting Engineer,  
118 Park St., Baltimore.

jc4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb5-tf 10 Wall st., near Broadway, New York.

**SILVER, GOLD, LEAD,**

[And Other Minerals,

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Agt for the Company,

Odd Fellows' Building,

mar26 Cor. Third and Walnut streets, Cin'ti, O.

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,**

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Enlign done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob ERNST.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.**

**POOLE & HUNT,  
Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS and AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

apc

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

Or SUMNER SMALL, Boston, Mass.

ap8

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 288 H Street, Washington, D. C.

apr12

**Thorough Bed Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TOM HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....OCTOBER 8, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 33.

#### EDITORIAL.

The Commercial Crisis—Causes, Explanatory Facts and Figures.....	525
Coal Mines on the Pacific.....	525
Suspension in Pennsylvania.....	526
Erie R. R. and Mr. Sumner's Statement.....	526
Michigan Central R. R.....	526
Brevities.....	526

#### RAILROAD DAGUERREOTYPES.

Cincinnati, Cumberland Gap & Charleston R. R.....	527
---	-----

#### RAILROADS.

Cincinnati & Fort Wayne R. R. Co.....	527
Important Railroad Convention in Ohio.....	528
Cincinnati, Cumberland Gap & Charleston R. R.....	529
Keokuk & Nebraska R. R.....	535

#### MISCELLANEOUS.

Notes Upon the New Territory of Arizona.....	530
Parchment Paper.....	533
Interesting Decision to Railroad Carriers.....	533
Earnings.....	533
On Superheated Steam—By Thos. Prosser, C. E.....	534

#### MONEY AND STOCKS.

Table of Stocks and Bonds.....	532
London Quotations.....	533
Sales at the New York Stock Board.....	533
Monetary and Commercial.....	533

—COAL MINES ON THE PACIFIC.—The San Diego Herald gives the following about the coal mines in its vicinity:—"A large party of men, with two additional engineers, arrived here yesterday from San Bernardino, to work at the San Diego coal mines. It will now be but a short time before we shall be able to furnish all the anthracite coal needed on the Pacific coast, and of a much better quality than any we get from Pennsylvania or New York."

### THE COMMERCIAL CRISIS—CAUSES, EXPLANATORY FACTS AND FIGURES.

In the Record of October 1st (No. 32) we had this paragraph:

"If the bank, or the merchant, or the railroad company fail, it is precisely from the same cause. Both, in flood tide, have *overtraded*—involved themselves in liabilities beyond their *present means to meet*.—They may be solvent, but they are in the ebb tide of commerce. The simple fact is, the *overtrading* of the commercial world, and the *extravagance* of the people, have done all the mischief to railroads, banks, merchants and people."

The proposition here stated should be illustrated and proved to all understandings; for, unless people perceive and act upon it we can have little hope of any radical cure for the evils of the day. We should first note here a portion of our political history antecedent to this crisis. First, a large number of political men and people, not confined to one party, have taught the *free trade*—that is, the admission of all *foreign goods free of duty or restriction* was the great *desideratum* of commerce. This class of men became predominant in the administration of the country, and, while it was impossible that our government should wholly adopt the system of free trade, they carried it as far as possible into practice.—They abolished all *specific duties*—so that they could not, and did not, draw a proper and useful discrimination between foreign goods that were necessary and profitable to our people and those which were the reverse. The government was obliged to raise its money by *imposts* on foreign wares; but the impost was made *horizontal*, without any discrimination as to the things which our own people might make, and those which we might more readily import. The consequence of this kind of tariff was, of course, a sudden enlargement of foreign commerce. The navigating interests of New York and New England were bloated up; ship-building progressed; ship owners received high freights; bill brokers flourished; we borrowed enormous sums, and were paid in foreign goods. A commerce like this may grow like a mushroom, but most obviously rests on a very unstable basis. Such was our commercial history prior to the present crisis.

But there was another place in our antecedent history scarcely less important than this. The part which the U. S. Bank took in the political proceedings of the country caused a war to be made upon it by the whole power of the government, which, in the end, resulted in its complete overthrow and bankruptcy. With all its faults, of any kind, that institution most undoubtedly was beneficial to the merchants and traders of the country, by reducing the cost of exchange less, and the currency more uniform by means of its branches in various cities, but accounting at one point. That this is a fact, every intelligent merchant conversant with business from 1825 to 1837 will admit. The Bank of the United

States was destroyed, and *nothing* was substituted in its place which could fulfil the same ends. The Sub-Treasury kept the United States funds, but furnished no exchange, and therefore could not make it uniform. But this was not all. Connected with the downfall of the United States Bank was a popular idea that *chartered banks* were evils, and there commenced a system of *tinkering* with the currency, which has proceeded with more or less violence to the present time; and which has destroyed the *stability* of banks without accomplishing any good purpose. There has been a pretence of *securing notes*; but, when a bank fails, that failure causes an immediate depression of its notes to the amount of at least 25 per cent., no matter how they may be secured. Banks have been hampered restricted, and warred upon, till all banks are unstable—not, perhaps, as to *solvency*, but as to the term of their existence and the profits of their business.

Such is the commercial *antecedent* history of the present crisis; and if the reader had ever seriously contemplated these facts would he have been surprised at the results? But, now we must turn to the facts of *overtrading* and *extravagance*.

There are persons who with gravity and earnestness boast that our commerce has been flourishing and profitable. In the sense we have already stated it has been. But now let us turn to the *overtrading*.

The Treasury Table of Commerce, ending 1st of July, 1857, seemed to show our exports to be \$2,059,000 greater than our imports. But how was this proved? Simply by overlooking the fact that we had paid *fifty millions in gold*!

Our total imports of foreign merchandise, including specie and bullion, amounted to.....\$360,890,144  
Specie and bullion imported.....12,461,799

Foreign imports, exclusive of specie and bullion.....\$348,428,345

Our total exports of domestic products, foreign goods re-exported, including specie and bullion.....\$362,949,144  
Specie and bullion exported.....69,136,924

Domestic exports, exclusive of specie and bullion.....293,812,220

Excess of foreign imports over exports from United States.....\$34,616,122

Thus, in the commercial exchange of merchandise, exclusive of specie, the balance of trade was against us, last year, over \$54,000,000.

We sent abroad, in specie and bullion.....\$69,136,924  
Imported specie from abroad.....12,461,799

Excess of specie exports over imports...\$56,675,125

We, in fact, *overtraded* in merchandise to the extent of \$54,616,000! We paid it in *gold*, which would have given a credit on our internal commerce at home to at least one hundred and fifty millions. Examining our business in 1856, in the same manner, we find that

The foreign imports, exclusive of specie, were.....\$310,432,310  
United States exports, exclusive of specie..281,219,423

Balance against us.....\$29,212,887



But the excess of exportation of specie and bullion over importation was \$41,537,853; so that we paid in that year \$12,324,966 more than was due on account of commerce strictly, which sum must have gone to pay part of the interest on foreign debts.

In the two years, then, between July, 1855, and July, 1857, we overtraded nearly an hundred millions of dollars, and paid for it in gold. We extract the following table, in relation to the exports and imports of coin and bullion, from the *Pennsylvanian*:

COIN AND BULLION.			
Years Ending	Exported.	Imported.	Excess of Exportation ov. Im.
1850.....	\$ 7,552,994	\$4,622,792	\$ 2,894,202
1851.....	29,472,752	5,453,592	24,019,160
1852.....	42,674,135	5,505,044	37,169,091
1853.....	27,486,875	4,201,382	23,285,493
1-54.....	41,177,300	6,758,587	34,438,713
1855.....	56,247,343	3,659,812	52,587,531
1856.....	45,745,485	4,207,632	41,537,853
2557.....	69,136,924	12,461,799	56,675,125

Aggregate excess of exportation over importation from 1850 to 1857.....\$272,607,168

When the question is how our foreign transactions, commercial and financial, affect our monetary condition, it is the excess of exportation over importation of specie which has to be considered, and that shows that in eight years we exported the immense sum of \$272,000,000. It is one thing to copy statistics, and quite another to understand them and use them to a rational purpose.

The *Pennsylvanian* is right. It is one thing to deal in the figures of statistics, and another to understand them. We have theorists who say this export of gold is nothing, for we dug it out of California. Very well—what did we get for it? The whole world cannot get round this simple fact—that we have exported two hundred and seventy millions in gold to pay for foreign merchandise, most of it utterly useless!

#### SUSPENSION IN PENNSYLVANIA.

The Governor of Pennsylvania has called an extra session of the Legislature of that State, to take measures relative to the recent suspension of the banks. In his message he recommends that the banks be released from the penalties attached to the suspension, and that such a course be authorized for a limited time. He also recommends that the banks be required to receive notes of each other at par in payment of all debts. Several bills have been introduced. One prohibits the issue of notes under twenty dollars. Another legalizes the suspension, and fixes a time for resumption. Another to extend relief to the people by suspending the collection of debts by the banks; also a bill suspending the operation of the Act of 1855, which perfects charters and imposes penalties for suspension; also authorizes banks to make loans, to discount their own and other notes for a period of — days; restricts the dividends to 6 per cent., and requires the publication of quarterly statements in the newspapers; the suspended banks to take the notes of other banks in payment of debts, under certain regulations; also authorizes a stay of execution for

one year in all cases where the defendant's estate, in the opinion of the Court, is worth the amount of judgment, or where security is given. The Act to take effect immediately on its passage, providing it be accepted by the banks within sixty days.

Mr. Brown's bank bill requires that the banks at Philadelphia and Pittsburg publish weekly statements of their assets and liabilities, and the country banks to furnish weekly exhibits of their affairs to the Auditor General, who is to arrange in a table form and publish in the newspapers; limits bank dividends to six per cent. clear of State taxes, until the said banks have accumulated a reserve or contingent fund of not less than twenty-five nor more than thirty per cent. on the capital stock, and thereafter limits the dividends to nine per cent., and the savings of above nine per cent. be paid into the State Treasury; requires said reserve or contingent fund to be invested in State or United States means, and deposited with the Auditor General as additional security for the redemption of notes—to be applied for that purpose upon failure to redeem in specie; prohibits banks, savings' funds and insurance companies from buying or purchasing notes at less than par value; prohibits banks from purchasing or acquiring their own stocks after — days; also the circulation of notes less than ten dollars.

Mr. Brown's bill relative to railroad and navigation companies, prohibits them from incurring a floating debt greater than ten per cent. on their capital stock; requires all companies now having a floating debt of a greater amount to reduce the same, as aforesaid, within one year; makes the Presidents, Directors, and other officers, individually liable for the floating debt.

Mr. Brown's joint resolution expresses, in the opinion of the Legislature, that if Congress has no power to control or restrain paper money, the constitution should be amended to confer that power, and if it has it, it becomes a duty to exercise it.

#### ERIE R. R. AND MR. SUMNER'S STATEMENT.

Mr. Sumner, the General Agent of the Erie R. R. Co. in Boston, excuses his charge of inaccuracy on our statement of facts in the matter of dishonoring passes already given, by the following letter from Mr. Moran:

Mr. Moran intimates that abolishing free passes is an idea of the Board of Directors, and that "he is not aware of any action that has been taken to render passes issued previous to the resolution void." Mr. Moran, as President of the Board and Superintendent of the road, ought to know the orders given to the conductors on the road, if he actually attends in person to the duties of his well paid office. We can tell him of more than one instance where the conductors, in dishonoring passes, stated that they were acting in obedience to orders, and in so doing were discharg-

ing a very unpleasant duty. If these conductors told the truth, and we have no reason to doubt it, Mr. Superintendent Moran's ignorance of their orders is unpardonable. Mr. Moran, as Superintendent of the road, should know at least the working orders. If he trusts these to cheaper men, we see no reason why a cheaper man could not have the name as well as the labor of the office.

The Erie Road is getting on slowly in raising its new loan of \$6,000,000; and we fear will get on more slowly still, till it lops off such extravagances as salaries of \$25,000 per annum, and really compels its working officers to devote their attention to its working duties.

MICHIGAN CENTRAL RAILROAD.—This Company are issuing proposals for a new loan of two million of dollars, to meet Bonds maturing July 1, 1858, and its floating debt.

The condition of the road is as follows:

Bonds maturing at various times to July 1, 1858.....	\$ 855,050 00
From July 1, 1858, to October 1, 1859.....	69,650 00
During the year 1860.....	1,389,000 00
Do " 1861.....	2,987 00 00
Do " 1872.....	463,613 33
Floating Debt.....	1,789,846 10

Total liabilities at the present time .....\$7,554,159 43  
To be provided for during the next ten months—  
Say Bonds as above.....\$ 855,050 00  
Floating Debt.....1,789,846 10

Total liabilities to Aug. 1, 1858.....\$2,644,896 10

The floating debt as created by constructive accounts and new rolling stock, amounting to \$1,546,610,75. The cash paid is \$185,780,36. The Company express their confidence in the ability of the road to increase its earnings and meet its liabilities.

—LOUISVILLE & NASHVILLE R. R.—The annual election for Directors of the Louisville & Nashville Railroad resulted in the choice of the following gentlemen: Hon. John L. Helm, of Hardin; Hon. Jas. Guthrie, and Messrs. B. J. Adams, A. O. Bramer and J. P. Wilder, of Louisville; and Mr. Underwood.

—MILWAUKEE & FOND DU LAC R. R.—Mr. L. Sykes, Esq., formerly Vice President of the Hudson River R. R., has been elected President of this road.

—HUDSON RIVER R. R.—D. T. Vail, Esq., of Troy, N. Y., has been elected Vice President of the Hudson River R. R.

—VIRGINIA & KENTUCKY R. R.—The stockholders of the Virginia & Kentucky Railroad, at a meeting in Abingdon, Virginia, elected B. Bush Floyd President, and W. B. Thompson, formerly of the Baltimore & Ohio Railroad, Chief Engineer. The contract for the grading and complete equipment of the road was let to contractors at \$38,000 per mile, they to equip it with a locomotive for every ten miles, a passenger car for every twenty miles, a box car for every five miles, and an open car for every mile.



# Railroad Daguerreotypes.

No. LXXXV.

## CINCINNATI, CUMBERLAND GAP & CHARLESTON R. R.

The report of this company is dated Oct. 1st, 1857. The following are the officers:

President—WALTER B. EVANS, Tazwell, Tennessee.

Treasurer and Secretary—G. W. BARNETT, Norristown.

### DIRECTORS.

Col. HUOH JONES,  
Col. WM. HOUSTON,  
A. D. WOODSON,  
JOHN G. NEWHE,  
Col. WM. M. COCKE,  
M. CARIGEE,  
D. MORRIS,  
JOHN F. NOE,  
S. L. HUFFMASTER,  
L. D. FRANKLIN,  
WM. A. MORE,  
Gen. A. E. SMITH,  
STEPHEN HUFF,  
JAS. R. ALLEN

The annual meeting of the stockholders is held on Tuesday after second Monday in May.  
Length of road.....91 miles.  
Termini.....Cumberland Gap and Point Rock.

### COST OF CONSTRUCTION.

Number of shares.....13,665.  
Price per share.....\$25.  
Capital.....\$1,451,646.

## Railroads.

### EXHIBIT OF THE CINCINNATI AND FORT WAYNE RAILROAD COMPANY.

We have before us a very interesting document prepared by PETER P. BAILEY, Esq., President, on the prospects and resources of the Cincinnati and Fort Wayne Railroad. As we regard this road as having *intrinsic* merits of high character, and also of great commercial importance to a rich and densely inhabited region of country, we shall give this exhibit a more extended notice than we have usually bestowed on such papers. The original plan was to have constructed the road on the route indicated by the following table. It ran through Hamilton, Butler and Preble counties, in Ohio; and Wayne, Randolph, Jay, Wells and Allen counties, in Indiana; and connected with the following places, with the distance here named between each, and from Cincinnati to each, viz:

	Miles.	Total—Miles
From the corner of Broadway and Court streets, Cincinnati, to Reading.....	9	
From Reading to Sharon.....	3	12
" Sharon to Hamilton.....	12½	24½
" Hamilton to Darrtown.....	9½	34
" Darrtown to Oxford.....	4	38
" Oxford to Fair Haven.....	10	48
" Fair Haven to Richmond.....	14	62
" Richmond to Newport.....	8½	70½
" Newport to Winchester.....	15½	85½
" Winchester to New Mount Pleasant.....	12½	98½
" New Mt. Pleasant to Camden.....	10½	108½
" Camden to Bluffton.....	17	125½
" Bluffton to Canal in Fort Wayne.....	23½	149
Making the total distance 149 miles.		

This line is of easy construction, and is scarcely equalled, either in alignment or grades, and may be worked with rapidity and economy.

This indicates the route, and unquestionably it is a remarkably good one for a Railroad, whether we regard the construction, the population, or the resources of the country.

Work was commenced on this route, and more or less done for three years, when the company were compelled to suspend operations.

The total expenditures up to date, were.....\$255,282  
The assets of the Company.....52,068  
The amount necessary to complete the preparation of the road for iron, from Fort Wayne to Winchester.....79,948

This is sixty-one miles, and would complete a connection between Fort Wayne and Cincinnati *via* Dayton. From Hamilton into Cincinnati, the company may have *three* routes, viz: one as stated above, through the tunnel route, a second, an independent route into the center of the upper plain of the city, and the third, by the *Cincinnati, Hamilton and Dayton Railroad*, which would undoubtedly be willing to make arrangements with any company bringing it business.

As the company propose to issue bonds, it is proper to show their resources. What the company have done, we have seen, but we ought to have stated that one link in the line is the Four Mile Valley Road, which lies between Hamilton and the Indiana line. These companies are practically connected, and Mr. Bailey is, we believe, President of both. The financial condition of the Four Mile Valley Road will be seen by the following statement, in connection with the one given above.

The condition of the two companies forming a line from Fort Wayne to Hamilton, distance 124½ miles, and within 24½ miles of Cincinnati may in short, be stated as follows:

Expenditures of C. & F. W. R. R. Co.....\$255,282 72  
" of F. M. V. R. R. Co.....141,339 46

Total.....\$416,246 46

### ASSETS.

Real Estate Notes and uncollected subscription of C. & F. W. R. R. Co.....\$52,068 79  
do do do F. M. V. R. R. Co.....141,339 67

Total.....\$193,458 46

### INDEBTEDNESS.

Of C. & F. W. R. R. Co.....\$5,625 27  
Of F. M. V. R. R. Co.....28,758 96

Total.....\$34,384 23

\$21,000 00 of the Four Mile Valley Railroad Company's indebtedness, is in bonds, \$20,000 of which was paid to their present contractor.

The condition of the two companies is, at present, strong enough.

In proposing to issue bonds, Mr. BAILEY well says, that he does not suppose the road bed and road is the *only* security offered. On the contrary, it is the *merits* of the road, as contained in its resources and its future business, that must of course, contribute the chief security of the bond holder. Here we

may exhibit some of the resources of the country.

The following table exhibits the number of traders on the line of the road, trading with Cincinnati.

The whole number of traders in the counties through which our road runs, and the number of those trading in Cincinnati, are as follows:

Counties in Ohio.	No. traders in each county.	No. traders buying in Cin.
Butler.....	270	229
Preble.....	184	113
Counties in Indiana.		
Wayne.....	312	278
Randolph.....	96	83
Jay.....	26	22
Wells.....	40	29
Allen.....	115	70
Totals.....	1043	824

Or more than four-fifths of the whole number trade with Cincinnati.

The following shows the population and valuation of this district.

We compile from the same authority as in the other cases.

### CINCINNATI AND FORT WAYNE RAILROAD LINE.

Counties.	Population.	Total value of taxables for 1856.
Allen.....	16,919	\$3,077,100
Wells.....	6,152	1,697,755
Jay.....	7,047	1,640,266
Randolph.....	14,725	3,155,473
Wayne.....	25,330	8,680,900
In Ohio:		
Preble.....	21,736	10,903,109
Butler.....	30,769	18,737,173
Total.....	122,698	\$49,991,776

We leave out Hamilton county in which Cincinnati is situated.

Number of miles of road, through these counties, 124. Value of taxables per mile of road, \$403,159. Population of these counties as per United States Census returns for 1850, 122,698, or 1036 per mile of road. This shows an excess in taxables, of \$90,095, and of population 42 per mile, over the Indianapolis and Cincinnati Railroad route, the best paying road but one, in the State.

But one of the most interesting aspects in which to look at the Fort Wayne road is, as a *part* (as it really is) of the grand arterial line from Mackinaw to Cincinnati. In reference to this, Mr. Bailey says:

But the connections which will, when completed, furnish us the most reliable to be drawn off by competing lines, remains to be stated; we mean the two great lines from Fort Wayne to the Straits of Mackinaw, which we shall now point out. One of these lines will occupy a route lying a little west of due north from Fort Wayne, passing through Allen, Noble and La Grange counties, in Indiana, and the towns of Sturges Prairie, Kalamazoo and Grand Rapids, and north of the latter place, through the counties of Kent, Newaygo, Mecosta, Lake, Wexford, and Grand Traverse, in Michigan, terminating at or near Grand Traverse Bay or the Straits of Mackinaw. The other will pass northwardly, a little east of a north line from Fort Wayne to Hillsdale, Jonesville, and Lansing (the capital of the state,) in Michigan, and thence near Saginaw Bay, on the east part of the state, terminating near Traverse Bay or the Straits of Mackinaw, leaving a wide space in the center, between these lines, unoccupied



by north and south roads. The counties north of Lansing, on or near this line, are Clinton, Gratiot, Midland, Isabella, Gladwin, Clare, Ross, Common, Crawford, Otsego and Emmet.

These roads have received large grants of lands from government, which are now being selected, and which are variously estimated to amount to, for the west line from 614,460 to 825,000 acres, and on the east line from 940,800 to 1,100,000 of acres, located in alternate sections along their respective routes. The grants were made in 1856 by the general government to the state for these purposes, and confirmed to these Companies by the Legislature of Michigan at its last winter's session, since which time both Companies have been actively engaged in making surveys and getting ready for an early prosecution of the work. Lettings of 113 miles of the eastern line are advertised to take place the present month, and more than half of the western line, from Fort Wayne to Grand Rapids, is already under contract. No doubts are entertained that both of these roads will be built.

It is supposed these lands will be worth \$8,000,000, and thus the construction of the Mackinaw roads will be secured.

As we have said, Mr. Bailey's road has great merit, and we know of no reason why he should not get the money, if money is to be got for anything. The bonds offered, comprise \$1,600,000 on 93 miles of the road, from Fort Wayne to the state line, and \$679,000 on 31 miles of road, from Hamilton to the state line. Offers are to be made to P. P. Bailey, Esq., Fort Wayne. We commend this investment to the monied public, and to the consideration of the contractors.

#### IMPORTANT RAILROAD CONVENTION IN OHIO.

*Proceedings and Resolutions—Free Passes and Runners to be Abolished—Advance in Freights—Another Convention to be held in October.*

On the call of the Presidents of Ft. Wayne & Chicago, Columbus & Xenia, Cincinnati, Hamilton & Dayton, Mad River & Lake Erie, Cleveland, Pittsburg & Ashtabula, and Cleveland, Columbus & Cincinnati Railroads, a Convention of Representatives of the several railroad companies west of suspension bridge, Buffalo, and the Ohio river, assembled in Columbia, Ohio, Thursday, Sept. 24, at 3 o'clock P. M., to take into consideration the proper course to be pursued in view of the late action of the four Eastern roads, and to transact such other business as might be deemed for the mutual benefit of all.

The following resolutions, presented by the committee, were adopted:

Whereas, This Convention fully approves of the agreement passed on the 7th of September last by the four Eastern roads regarding the reform and retrenchment in railroad management, so far as the same is applicable to Western roads, not admitting the right of Eastern roads to determine the direction of Western-bound business. Many of the Western roads not being represented at this meeting, it is found inexpedient to bind by agreement the companies here represented. And, in view of the limited time given by the four Eastern roads for the Western roads to decide upon the matter, we suggest a meeting to be held at Cleveland on the 14th day of

October (7 P. M.), which all parties interested be requested to attend, and that notice be given to the Presidents of the four Eastern roads of the necessity of their postponing until after the 14th day of October, for the Western roads to withdraw their passenger agents from the cities of New York, Boston, Philadelphia and Baltimore, and that the following be adopted as the expression of this Convention, and be presented to the meeting to be held at Cleveland on the day mentioned.

1. Neither company shall hereafter, either directly or indirectly, employ runners or agents of any description for the purpose of soliciting passengers, or allow any compensation, by way of commission, drawback, or otherwise, for procuring such passenger business. But each party shall be at liberty to employ one person as a traveling agent, to inquire into the sale of tickets by connecting roads over the lines of roads represented by such agents, in order to ascertain if the company such agent represents is fairly treated. Each company whose road terminates at any river or lake ports, may also employ not exceeding two runners or agents, to procure passengers, as against water craft. Such agents may be paid by the several companies forming the line so terminating. It is further agreed that the parties hereto will dispense with the runners herein provided for, at any time steamboat companies or owners will also dispense with them.

2. That an increase in all rates of freight are required and expedient at this time. That the rates be made uniform between competing points by all lines. That the classification now in use be adopted. No line shall employ more than one man as freight agent or solicitor of freight at New York, Boston, Philadelphia or Baltimore, or at the principal lake and river ports in the West.

No line shall allow any drawback or commission for procuring freight. That an addition of not less than ten per cent. on express companies giving time receipts over any line, or by any railroad company giving or accepting time receipts independent of such express companies.

3. It is agreed that on and after Nov. 1, 1857, no company represented in this convention shall issue, directly or indirectly, any free tickets or passes, except to employees and persons or agents on the regular service of the company, and for strictly charitable purposes.

4. No road shall hereafter issue, or cause to be issued, any bills or posters, except such as may be permanently enclosed and protected in frames, and all such advertisements shall be limited to a true statement of the distance, direction and connections of the particular route, the exact time of the several trains and the rates of fare, and shall not contain any untrue reference to competing routes.

5. It is further agreed that if any company assenting to this agreement shall violate or neglect to carry out any of its provisions, and shall refuse for five days after notice of the violation, which may be given by any company whose interests are injured thereby, to make due explanation or correction of the abuse, the company so offending shall be considered as having violated the contract, and withdrawn from the same; and when its violation shall have been fully made out to the satisfaction of referees to be hereafter chosen, they shall give immediate notice thereof to the other parties hereto who shall thereupon discontinue all ticketing and freight arrangements with said companies, and that the four

Eastern lines be requested in all such cases to apply the same remedy wherever such fact is established.

6. That each and every road common to two or more competing roads, or lines of roads, shall, in all instances, act fairly and impartially, and in a spirit of strict neutrality, in the sale of tickets and the contracting for freight over the competing lines connecting with such road. Any variation from this principle shall be considered a violation of the compact between the companies here presented, and shall be a matter of reference, and treated the same as any other violation.

7. The rates of passenger fare on competing lines to all common points shall be uniform, and shall be reduced only by consent of all the parties hereto, and baggage may be checked between the termini of the four great Eastern lines, and the termini of their Western connections on the Ohio and Mississippi rivers. Eighty pounds of baggage shall be allowed to each first class passenger; all extra baggage shall be charged double first class freight rates. It shall be collected as far as the baggage is checked—a manifest sent with it, and the proportions reported to the respective roads, and paid in ticket balances, in such manner as the General Ticket Agents may direct. Emigrant baggage shall be charged such rates as the General Freight Agents of connecting lines may determine.

8. Whenever freight marked and consigned to any line shall be diverted from its proper channel, and carried by a competing line, the line so deprived of its freight may claim and receive from the company or companies in fault the amount collected on its own line for the transportation of such freights.

9. That the Eastern roads be requested to advertise their Western connection in their principal ticket offices, in some uniform and impartial manner, with correct maps to designate the routes; and that passengers be directed to select their routes before applying for tickets. The expense of such advertisements to be paid by the Western companies.

A tenth resolution, fixing the maximum of speed to be maintained on the roads, was indefinitely postponed.

The following additional resolution was adopted:

That Western railroad companies are willing to coincide with the action of the four great Eastern lines in assuming the control and direction of passengers and traffic destined over our roads from the East, when, after conference and consultation together, such arrangements shall be mutually agreed on as are deemed sufficient to secure satisfactory protection to their several rights and an impartial distribution of business.

A committee was then appointed to revise the language of the resolutions and to send circulars to absent roads to attend at Cleveland on the 14th of October next, when another Convention will be held.

The committee of Freight Agents presented two resolutions as to the freight tariffs and classification of freight on Western roads. The rates recommended were adopted, and other matters referred to in their report were referred to the next Convention.

The classification of freights made by the 7th September Eastern Convention, as to the western-bound freights, the committee recommended to be approved, and that of the Cleveland Convention held in '56, as to eastern-bound freights, was approved, with a few exceptions as to candles and a few other articles.



CINCINNATI, CUMBERLAND GAP AND  
CHARLESTON RAILROAD.

## PRESIDENT'S REPORT.

We are indebted to the officers of this road for a copy of the Report of its President, made to the stockholders, June 13th, 1857. The report states:

Your Road was chartered by an act of the Legislature of Tennessee, Nov. 18, 1853, with as liberal provisions of incorporation as those granted to any Railroad in the State, establishing only three points of location, *termini* at Cumberland Gap and Paint Rock, and an intermediate point at Morristown, on the line of the East Tennessee and Virginia Railroad.

During the session of the General Assembly of your State in which the charter for your road was granted (1853-4) a liberal appropriation was made to it by an act passed Nov. 8, 1854, entitled an act to amend an act passed Feb. 11, 1852, to establish a system of Internal Improvements in this State.

After the necessary surveys and estimates of cost had been made and reported to the Board of Directors by the Chief Engineer, the Board met at Bean's Station, and definitely located your road as follows:

Beginning at Cumberland Gap and running from thence *via* Tazwell, Notchie Gap, Beans' Station, Morristown, near the Mouth of Chucky, along the valley of the French Broad river *via* Newport to Paint Rock. The Board of Directors having succeeded in raising the amount of stock as they believed, sufficient to entitle your road to the benefits of the State appropriation for bridge purposes, whenever the required amount of bridge work was done, proceeded to advertise proposals for work, and at a meeting of the Board held at Bean's Station, Sept. 4th, 1855, let to contract two of the most costly bridges on the whole line, and soon thereafter according to previous notice at a meeting held in Tazwell, Oct. 18th, 1855, let to contract on quite favorable terms, thirty miles of the grading of your road, ten miles North of the East Tennessee and Virginia Railroad at Morristown, extending to Bean's Station and twenty miles south, extending to Newport, in Cocke county.

Cost of grading and masonry of road from Paint Rock to the line of the East Tennessee and Virginia Railroad at Morristown.

Cost of graduation.....\$161,493 00  
Cost of Masonry.....110,490 00  
Twenty-five per cent, added for land damages, cross ties, salaries of officers, &c.....67,995 97

Total est. cost of grading and masonry....\$339,979 87  
which amount of cost deducted from \$541,646, the total amount of stock of your Company will leave a surplus of \$201,666.13; after paying for not only the grading of your road, but also the masonry, and all other contingent expenses necessary to prepare the road bed for the laying down the iron—to be applied to the construction of your road north of the East Tennessee and Virginia Railroad, with a prospect, I would say almost a certainty of obtaining the following additional subscriptions, as the work advances, and full public confidence is had in its success.

Amount of additional stock by contractors on work not under contract.....\$100,000 00  
Amount of probable stock by Cocke county, 65,000 00  
Am't of probable stock by Grainger county, 75,000 00  
Am't of probable additional stock by individuals.....50,000 00  
Amount of surplus above.....201,666 13

\$491,666 13

Making the above total amount of means

for the construction of the northern portion of your road. The following statement will show you the total cost of work done on your road and by whom done:

COST OF WORK DONE SOUTH OF MORRISTOWN.			
	Masonry.	Grading.	Total.
S. J. Casey.....	100.83	1917.28	2,018.11
Peter Juice.....	3.15 00	4,211 45	4,236 45
Geo. Croft & Sanipaw.....	1,212 50		1,212 50
Total.....	\$1,628 33	6,128 73	7,757 06

COST OF WORK DONE NORTH OF MORRISTOWN.			
	Masonry.	Grading.	Total.
T. L. Bibb & Co.....	\$8,698 21		8,698 21
A. T. Burton.....	1,312 78		1,312 78
Jacob Hill.....	5,768 70		5,768 70
J. W. Shelton.....	317 50	1,671 00	1,988 50
Wm. M. Thurman....	4,067 40	310 06	4,397 46
Total.....	20,184 54	1,981 06	22,165 60
TOTAL COST OF WORK DONE ON THE WHOLE LINE OF ROAD.			
	Masonry.	Grading.	Total.
Southern end.....	1,628 33	6,128 73	7,757 06
Northern end.....	20,184 54	1,981 06	22,165 60
Total.....	21,812 87	8,109 79	29,922 66

## TOTAL COST OF CONSTRUCTION OF ROAD.

The report of Capt. R. L. Owen, Chief Engineer, of June 1855—based on the preliminary surveys then made, estimated the total cost of grading, masonry and a full and complete equipment of your road at \$2,310,000, which amount of cost is believed can be reduced in a definite location of the whole line of road to \$2,000,000.

Amount of actual and prospective means of the Company:

Individual subscription.....	\$152,427 00
Union Stock Company.....	125,000 00
Stock of Claiborne county.....	64,219 00
Probable subscription of Cocke county.....	65,000 00
" " of Grainger county.....	75,000 00
Additional stock by individuals.....	80,000 00
" " by contractors.....	100,000 00

Total am't of stock by individuals, counties, companies, and contractors.....\$631,646 00  
Am't of State appropriation for bridges.....200,000 00  
Amount of State appropriation for iron and equipment (ten thousand dollars per mile) 90 miles.....900,000 00

Making the total means of the Company..\$1,731,646 00  
Which deducted from \$2,000,000, the estimated cost of the road, will leave \$268,354 to be supplied by other resources.

To meet this deficiency as you will have to do, I would propose to issue mortgage bonds to that amount, which can be disposed of at or near par in putting the remainder of the work on the line under contract. There can not be much difficulty with contractors in disposing of so small an amount of bonds for a fair consideration.

The only difficulty in the way of putting the whole line of your road from Cumberland Gap to Paint Rock under immediate contract, and in having the steam engine to pass over it from one end to the other in a few years, depends wholly upon your success in raising about fifty thousand dollars of additional individual subscriptions, \$65,000 by a county subscription of Cocke, and \$75,000 by a county subscription of Grainger, which I hope and believe will be removed in a very short time.

That your road is the only one that will ever be built through Claiborne, Grainger, Jefferson and Cocke counties, that will constitute an important link in the great route South—a tier of counties that are unsurpassed by any in East Tennessee in the natural elements of wealth—rich in agricultural productions, as corn, wheat, oats, potatoes, grass and fruits; and in many valuable minerals, as lead, zinc, iron, magnesia, marble, burr rock, and hydraulic lime. At the northern terminus of your road, commences one of the most extensive coal fields in the world, which

extends north of Cumberland Gap, to the distance of about one hundred miles, through which the Kentucky Union Railroad will pass and connect with your road at Cumberland Gap. The immediate vicinity of said coal banks to, and their connection with the iron, lead, and zinc mines of Claiborne and other counties on the line of your road, together with the facilities the French Broad and South Carolina Railroads will give to the transportation of raw cotton, must make the line of your road distinguished for the manufacture of iron, lead, zinc, cotton goods, and prove a source of immense wealth to the country. In passing south from Cumberland Gap, your road will pass through a gap in Poor Valley Ridge, which has embedded within it, the most extensive veins of dye stone iron ore in the world—it will then pass on into Powell's Valley, one of the most beautiful and productive in the State, and from thence south through an uneven belt of country some eight or ten miles wide, through which Powell's river runs. In this section of country are situated the lead and zinc mines of Claiborne county, which are very extensive, and bid fair to be very productive, and must, when fully developed, become objects of great local and national importance, which will furnish your road with large amounts of freight. Your road will then pass on south in Claiborne county, through the gaps of a succession of ridges, Walden's, Powell's and Coma, all of which have immense quantities of the best iron ore, also in Walden's Ridge it will cross beds of fine marble and mill stone rock in endless quantity, then passing south to Clinch Mountain in the valley north of said mountain, in Grainger county, along the line of your road, are found immense quantities of Marble. Passing on south of said mountain, into the valley of Bean's Station and Rogersville, it will cross the belt of marble rock that leads east through Hawkins county, which is considered to be the finest in the States; the full development of which must add immense wealth to the country and furnish a large amount of freight for your road.

I shall next proceed to show you the necessity of your road, that it must ever stand without a rival, that no other road can be constructed between Cincinnati and Louisville on the north, and Charleston and Beaufort on the south, that can supplant it, either in regard to distance, cheapness of construction or in capacity to develop the large area of country, and will thereby give the greatest facilities to commerce and travel and the highest stimulus to agriculture and manufactures, that it will form an important link in a great Railway line extending across the Union, from lake to ocean, from Sandusky and Chicago, via Cincinnati and Louisville, the great commercial centers of the upper and lower Ohio valley converging at Lexington, Kentucky, the largest inland city of the State, situated in one of the richest agricultural districts in the United States, into one mighty channel of commerce and travel, and from thence will pass on south to Cumberland Gap, for the most part over a continuous bed of stone coal, and by or near Goose Creek Salt Works, at which point or further south at Bean's Station, it will send off a great commercial artery to Norfolk, through the Virginia and Tennessee Railroad, which is now finished to Bristol on the Tennessee line, and has direct railroad communication with the Atlantic seaboard at Norfolk, and which in passing fur-



ther south, will cross the East Tennessee and Virginia Railroad at Morristown, 44 miles east of Knoxville, where it will form a communication with the whole Southern system of Railroads in the direction of Nashville, Memphis, New Orleans, Mobile, Pensacola, Savannah, and Norfolk; and in passing from thence further south to Asheville, N. C., it will send off another great commercial artery to Beaufort and Wilmington on the Atlantic sea board of that State, and will thence pass on to Charleston on the line of the Greenville and Columbia Railroad, or the Spartanburg and Columbia Railroad, or both, getting strength every step as it advances towards the harbor of Charleston, there to distribute to the world in profusion, its rich abundance. Besides your road well deserves the appellation of a Military road, and the fostering care of the general Government in the event that the country should become involved in a sanguinary war with some powerful nation, and the enemy should be thrown upon your Atlantic shores and sea board cities in formidable numbers, murdering and plundering the defenceless citizens, and burning and sacking defenceless towns and cities, from what quarter could relief be expected with more certainty, and in so short a time than from the hills and valleys of East Tennessee, Western Virginia, Western North Carolina, and the State of Kentucky. The hardy yeomanry along the line of your road, with brave hearts, would rush to the relief of their brethren of the South, upon the shortest notice, and would make an impregnable bulwark of defense to the Southern sea board; if this great Southern work were completed, which must stand through all time without formidable competition, which will appear obvious from a comparison of the distances and costs of your road with the Blue Ridge Railroad, the only line that can have the least claim that way.

Distance from Cincinnati to Charleston via Lexington, Cumberland Gap, Morristown, Paint Rock, Asheville and Columbia :

Distance from Cincinnati to Lexington.....	96 miles.
" Lexington to Cumberland Gap.....	128 miles.
" Cumberland Gap to Morristown.....	51 miles.
" Morristown to Paint Rock.....	39 miles.
" Paint Rock to Asheville.....	43 miles.
" Asheville to Columbia.....	160 miles.
" Columbia to Charleston.....	129 miles.

Total dis. from Cincinnati to Charleston.....646 miles.

Distance from Cincinnati to Charleston, via Lexington, Danville, Knoxville and Anderson Court House :

Distance from Cincinnati to Danville.....	132 miles.
" Danville to Knoxville.....	186 miles.
" Knoxville to Anderson Court House.....	197 miles.
" Anderson Court House to Charleston.....	225 miles.

Total distance.....740 miles.

The above tables of distances show a difference of distance in favor of your line of Railroad between Cincinnati and Charleston over the Blue Ridge and Knoxville and Kentucky road of ninety-four miles, the same proportional difference also appears in a comparison of distances on the two lines between Morristown and Charleston and Knoxville and Charleston.

Distance from Morristown to Charleston via Paint Rock, Asheville and Columbia :

Distance from Morristown to Paint Rock....	39 miles.
" Paint Rock to Asheville.....	43 miles.
" Asheville to Columbia.....	160 miles.
" Columbia to Charleston.....	129 miles.

Total distance.....371 miles.

Distance from Knoxville to Charleston via Anderson Court House :

Distance from Knoxville to Anderson Court House.....	197 miles.
Dia. Anderson Court House to Charleston.....	225 miles.

Total distance.....422 miles.

Making a difference in favor of the French Broad and Charleston line over the Knoxville and Blue Ridge Road of fifty-one miles.

Distance from Knoxville to Charleston, via the East Tennessee and Virginia Railroad to Morristown, and via French Broad Valley, Paint Rock, Asheville and Columbia.

Distance from Knoxville to Morristown.....	44 miles.
" Morristown to Paint Rock.....	39 miles.
" Paint Rock to Asheville.....	43 miles.
" Asheville to Columbia.....	160 miles.
" Columbia to Charleston.....	129 miles.

Total distance.....415 miles.

Showing a difference of seven miles in favor of the French Broad Valley, Asheville and Columbia line, even from Knoxville, over the Blue Ridge & Knoxville road.

To show you further the importance of your line of road over that of any other, will add the following table of distances :

Distance from Cincinnati to Cumberland Gap via Lexington.....	224 miles.
Distance from Cumberland Gap to Morristown.....	51
" " Morristown to Knoxville.....	44

Total distance.....319

Distance from Cincinnati to Knoxville via Danville :

Distance from Cincinnati to Danville.....	132 miles.
" " Danville to Knoxville.....	186

Total distance.....318

Making a difference in distance of only one mile against your road, in favor of the Danville & Knoxville Road.

Distance from Cincinnati to Knoxville via Cumberland Gap, Powell's Valley, Jacksborough and Clinton :

Distance from Cincinnati to Cumberland Gap.....	224 miles.
" " Cumberland Gap to Jacksborough via Powell's Valley.....	40
" " Jacksborough to Clinton.....	23
" " Clinton to Knoxville.....	16

Total distance.....3

Making a distance in favor of the line by Cumberland Gap via Powell's Valley to Knoxville, over that via Danville, of 18 miles, which shows the importance of the Knoxville & Kentucky Railroad Company extending their line of railroad through Powell's Valley to Cumberland Gap, and connecting with the line of your road at that point.

Distance from Cincinnati to Norfolk via Cumberland Gap, Powell's Valley, Abingdon, and the Virginia and Tennessee Railroad :

Distance from Cincinnati to Cumberland Gap.....	224 miles.
" " Cumberland Gap to Abingdon via Powell's Valley.....	130
" " Abingdon to Lynchburg.....	199
" " Lynchburg to Petersburg.....	120
" " Petersburg to Norfolk.....	79

Total distance.....742

Distance from Cincinnati to Norfolk via Cumberland Gap, Bean's Station, Rogersville, Bristol, Abingdon, and the Virginia & Tennessee Railroad :

Distance from Cincinnati to Cumberland Gap.....	224 miles.
Cumberland Gap to Bean's Station, on the line of C. G. & C. R. R.....	36
Bean's Station to Rogersville.....	92
Rogersville to Bristol.....	50
Bristol to Lynchburg.....	204
Lynchburg to Norfolk.....	199

Total distance.....735

Making a difference of 7 miles in favor of the line by Bean's Station and Rogersville; also giving it the additional advantage of passing

along the whole length of the Hawkins county marble quarries, which are inexhaustible in their nature, and the quality of the rock unsurpassed by any in the Union, and which would be capable of furnishing an immense amount of freight for the Virginia & Tennessee Railroad, to supply the demands of the Eastern cities, which will certainly constitute a very strong motive for that company to adopt that line in the extension of their road to Cumberland Gap.

Distance from Cincinnati to Beaufort via Cumberland Gap, Morristown, Paint Rock, Asheville, Salisbury and Raleigh :

From Cincinnati to Cumberland Gap.....	224 miles.
Cumberland Gap to Paint Rock.....	90
Paint Rock to Asheville.....	43
Asheville to Salisbury via Lincolnton.....	126
Salisbury to Raleigh via Ashboro'.....	117
Raleigh to Beaufort via Waynesboro'.....	173

Total distance.....763

The above exhibit of tables of distances show the following to be the respective distances from Cincinnati to Norfolk, Beaufort and Charleston :

Distance from Cincinnati to Norfolk via Cumberland Gap, Bean's Station, Rogersville, Bristol, and the Virginia & Tennessee Railroad, 735 miles.

Distance from Cincinnati to Beaufort via Cumberland Gap, Morristown, French Broad Valley, &c., 783 miles.

From Cincinnati to Charleston via Cumberland Gap, Morristown, French Broad Valley, &c., 646 miles.

Cincinnati to Charleston via Danville, Knoxville and Blue Ridge Railroad, 740 miles.

Which places Charleston, by the Cumberland Gap and French Broad Valley route, 89 miles nearer Cincinnati and Louisville than Norfolk, and 137 miles nearer than Beaufort, and five miles further from Cincinnati by the Danville, Knoxville & Blue Ridge Railroad; making Charleston, by the Cumberland Gap, Morristown and French Broad Valley route, the nearest commercial point possible from Cincinnati and Louisville on the Atlantic or Gulf seaboard, and five miles further than Norfolk by the way of Danville, Knoxville & Blue Ridge Railroad.

## NOTES UPON THE NEW TERRITORY OF ARIZONA—NO. 1.

THE NEW TERRITORY OF ARIZONA—better known as the GADSDEN PURCHASE—lies between the thirty-first and thirty-third parallels of latitude, and is bounded on the North by the Gila River, which separates it from the Territory of New Mexico; on the East by the Rio Bravo de Norte, (Rio Grande) which separates it from Texas; on the South by Chihuahua and Sonora, Mexican provinces, and on the West by the Colorado River of the West, which separates it from Upper and Lower California. This great region is six hundred miles long by about fifty miles wide, and embraces an area of nearly thirty thousand square miles. It was acquired by purchase from Mexico during the mission of General Gadsden, at a cost of ten millions of dollars. In the original treaty as negotiated by General Gadsden, a much better Southern boundary than the one adopted by the Senate of the United States in confirming the treaty, was conceded by Santa Anna. The line at present is absurd in its course, and cuts off from our territory the head of the Santa Cruz river and valley—the Sonoita val-



ley—the San Bernadino valley, the whole course of the Colorado River from a point twenty miles below the mouth of the Gila river, and worse than all, the control of the head of the Gulf of California—and the rich and extensive valley of Lake Guzman; besides a large and extremely valuable silver region, well known both to Mexican and Americans. General Gadsden's line included nearly all the Territory south of the Gila River to the thirty-first parallel of latitude—all the advantages above mentioned—gave us the mouth of the Colorado River—and probably a part near the head of the Gulf at ADAR'S BAY. We have no accurate survey of the West coast of the Gulf of California; but I am strongly of opinion that the original line conceded by Mexico would have thrown a portion of the Gulf into American hands, by cutting of an arm of it extending east and north from the main body of water. A port on the Gulf is of great and immediate necessity to our Pacific possessions. Of this hereafter.

The Gadsden purchase is attached by Act of Congress to the Territory of New Mexico. At the time of its acquisition there was scarcely any population, except a few scattering Mexicans, in the Mesilla valley, and at the old town of Tucson in the centre of the Territory. The Apache Indian, superior in strength to the Mexican, had gradually extirpated every trace of civilization, and roamed uninterrupted and unmolested,—sole possessor of what was once a thriving and populous Spanish province.

There is scarcely anything in print with reference to the early history of Arizona, beyond the scanty but valuable notes of MAJOR EMORY and HON. JOHN R. BARTLETT, in their reports, and in the appendix to WILSON's late book, "MEXICO AND ITS RELIGION." To this last I beg to refer any reader who desires accurate information respecting the Northern Mexican provinces presented in a straight forward common sense style.

In the possession of the writer of these notes is a map drawn in 1757,—just one hundred years ago, presented by the Society of Jesuits to the King of Spain. The original of this map is now in the Archives of the Mexican Government. It was copied, with the notes relating to the Territory, and to Sonora, Chihuahua and Sonora, by CAPT. C. P. STONE, late U. S. A. The map bears the inscription "*Carte levee par la Societe des Jesuites, dedee au Roi d'Espagne en 1757.*"

The copy of the map, and the accompanying notes, are certified as accurate by the officer of the Mexican Government in charge of the Archives.

My information, therefore, upon the early history of this comparatively unknown domain, is accurate and reliable. As early as 1687, a Jesuit Missionary from the province of Sonora, which, in its Southern portion, bore already the impress of Spanish civilization, descended the valley of Santa Cruz River to the Gila. Passing down the Gila to its mouth, after exploring the country, he retraced his steps, penetrated the country North of the Gila river for some distance, and ascended the Salinas or Salt river, and other Northern branches of the Gila. The explorations of this energetic priest did not stop here. Proceeding East, he explored the valley of the San Pedro, and its branches; thence along the Gila to the Mimbres and probably to the Rio Grande and the Mesilla valley. Filled with the enthusiasm of his sect, he procured authority from the head of the Order in Mexico, and established missions and settlements at every

available point. In a report to the Government of the Viceroy of Spain, made during the early settlement of the province, I find the following language:—"A scientific exploration of Sonora with reference to mineralogy, along with the introduction of families, will lead to a discovery of gold and silver, so marvellous that the result will be such as has never yet been seen in the world."

The reports of the immense mineral wealth of the new country, made by the Jesuits, induced a rapid settlement. There are laid down on the map before me more than forty towns and villages. Many of these were of considerable size. There were a few North of the Gila, and several on the lower Gila, near the Colorado. The Santa Cruz and its tributary valleys teemed with an agricultural and mining population. Thousands of enterprising Spaniards cultivated the rich valley of the San Pedro, and scattered settlements flourished at every suitable stream and spring at the foot of the mountains towards the Rio Grande. The notes before me say:—"All these settlements and missions were founded in fertile valleys, and by streams and springs which produced luxuriant crops of wheat, corn and beans, and in many parts, grapes and other foreign fruits were cultivated."

In the western part of the Territory were the missions of St. Pierre, St. Paul, St. Matthias, St. Simond, St. Francisco, Merce; the ranches of Eau Cheri, Eau de Lune, and others. On the Santa Cruz the missions of San Xavier del Bac, Santiago, San Csyetano and San Philippe; the towns of Tucson, Tubac, Reges, San Augusta, and many others.—San Xavier del Bac is still in existence. It is a mission church of great size and beauty, magnificently ornamented within. Forty thousand dollars in solid silver served to adorn the altar. Upon the San Pedro river were the missions of St. Mark, San Salvador, San Pantaleon, Santa Cruz, and the towns of Quiduria, Rosario, Eugenia, Victoria and San Fernando—the latter at the mouth—with many more. To the east some small settlements were found on the Valley del Suez—on the Mimbres, at the copper mines, north of the Mimbres, and to the south, the immense grazing and stock raising establishment of San Bernadino, where since have been raised hundreds of thousands of cattle and horses. The Indians in the vicinity of the missions were reduced first to obedience by the Jesuits, and then to slavery by the Spaniards.

The notes referred to above contain the names and localities of more than a hundred silver and gold mines which were worked with great success by the Spaniards. The survey of the Jesuit priest about 1687 was repeated in 1710 with renewed discoveries and consequent accession of population. From this time up to 1757 the conquest and settlement of the country was prosecuted with vigor both by the Jesuits' Society and Spanish Government.

The missions and settlements were repeatedly destroyed by the Apaches, and the priests and settlers massacred or driven off. As often were they re-established. The Indians at length, thoroughly aroused by the cruelties of the Spaniards, by whom they were deprived of their liberty, forced to labor in the silver mines with inadequate food, and barbarously treated, finally rose, joined with tribes who had never been subdued, and gradually drove out or massacred their oppressors. A superior civilization disappeared before their devastating career, and to-day there is scarcely a trace of it left, except scarcely visible ruins,

evident everywhere, of extensive and hastily deserted mining operations, and the tradition of the country. The mission of St. Xavier del Bac, and the old towns of Tucson and Tubac, are the most prominent of these remains. The labors of the Jesuits to civilize the Indians are still evident in the mission Indians, the Papagos and Pimas, who live in villages, cultivate crops of corn and wheat, and who, in the Christian and human elements of good faith and charity, are, to say the least, in no way inferior to the Mexican. After the massacre of four of Crabbe's unfortunate party near Sonora, by the Mexicans, the Papago Indians buried carefully the bodies to which Mexican inhumanity had denied this last charitable office. It is a curious and suggestive fact that the latitude of places upon Gila, Santa Cruz, and San Pedro, determined by the Jesuits about 1750, has lately been verified by the observations of Park, Michler and Emory. The instruments used by the Jesuits were constructed by them, the lenses being made from pebbles.

From 1757 down to 1820 the Spaniards and Mexicans continued to work many valuable mines near Barbarcos, and the notes in my possession speak of many silver mines, most of which contained a percentage of gold.—"The San Pedro mine in 1748 was worked with extraordinary success." Among the mines anciently worked, as laid down in the authorities heretofore referred to, were the Dolores, San Antonio, Casa Gorda, Cabriza, San Juan Batista, Santa Anna (which was worked to the depth of one hundred and twenty yards), Rosario, Cata de Agua, Guadalupe, Connilla, Prieta, Santa Catarina, Guzopa, Hurstano, Arpa, Descuhidara, Nacosare, Arguague; Churinababi, Huacal, Pinal, and a great number of others, which it would only be tedious to mention.

The most celebrated modern localities are Arivaca (also anciently famous as *Aribac*), Sopori, the Arizona mountains, the Santa Rita range, the Cerro Colorado, the entire vicinity of the Subac, the del Ajo, or Arizona copper mine, the Gadsden copper mine, and the Gila river copper mines. These last are situated directly upon the Gila, only twenty-five miles from its mouth. The writer assures the public that there is no room for doubt as to the authenticity of these statements, or the immense resources of the new Territory in silver, copper, and probably gold. As late as 1820, the Mina Cobre de la Plata (silver and copper mines), near Fort Webster, north of the Gila, were worked to great advantage—and so rich was the ore that it paid for transportation on mule back more than a thousand miles to the city of Mexico.

Every exploration within the past few years has confirmed the statements of the ancient records. The testimony of living Mexicans, and the tradition of the country, all tend to the same end. Col. Emory, Lt. Michler, Lt. Parke, the Hon. John R. Bartlett, late of the U. S. Boundary Commission, all agree in the statement that the Territory has immense resources in silver and copper. Colonel Emory says in his report:—"On account of the gold mania in California, I kept the search for gold and other precious metals as much out of view as possible, scarcely allowing it to be a subject of conversation, much less of actual search. Yet enough was ascertained to convince us that the whole region was teeming with the precious metals. We everywhere saw the remains of mining operations conducted by the Spaniards, and more recently by the Mex-

*Continued on page 532.*



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rt.	When Payable.	Where Payable	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend
\$1,000,000	6			1860	1st mortgage.	.....	Alb'ndria, Len & Hamp sh	.....	173	5,000,000.00				
495,800	6			1862-3	2d "	.....	Androscog'n & Kennebec	.....	54.53	1,400,000.00		209,473.46	170,346.98	none.
199,060	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	122,000.00	278,123.74	173,750.74	4 pr. ct. 6m
52,646	6			now	"	.....	B'ng'r, Old T. & Milford..	.....	12.5	125,000.00	52,646.26	39,104.40	2,671.61	15,000 in '53
500,000	7		N. Y.	1860	"	.....	Boston & Worcester..	.....	44 5-8	4,500,000.00	500,000.00	1,168,781.90	437,002.03	180,000 4,6m
500,000	7			1866	1st mortgage.	.....	Buffalo & State Line...	.....		1,300,000.00				5 pr. ct. 6m.
300,000	7			1857-9 62	Income.	.....	" " " "	.....						
500,000	7			1864	Domestic.	.....	" " " "	.....						
577,197	6				4th mortgage.	.....	Central Ohio.	.....						
192,200	7			1872	1st mortgage.	.....	Champl'n & St. Law'rnce	.....	43	1,872,800.00	1,001,087.00	169,200.00	77,700.00	10 per ct.
380,000	7			1874	2d "	.....	" " " "	.....						
1,440,000	7				Domestic.	.....	Ch'r'l'te & South Carolina..	.....	119	1,750,000.00	320,000.00	291,919.86	47 per ct.	\$79,300
1,300,000	6-7-8		N. Y.	4-7	1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	.....	138	3,746,900.00	3,114,000.00	1,093,185.00	371,725.23	15 pr. ct. 6m
374,000	8			8-9	2d "	.....	" " " "	.....						
				8-76	Convertible.	.....	" " " "	.....						
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa..	.....						
532,000					2d "	.....	Cin. Wil'ng'u & Zanes'ville	.....	13 1/2	1,761,149.16	2,241,500.00	221,491.96		
104,000					3d "	.....	" " " "	.....						
305,500					Income.	.....	" " " "	.....						
540,000	0				Convertible.	.....	Cleveland Col. & Cin.	.....	130	4,741,320.00		1 3,754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning..	.....	85	1,500,000.00				
400,000				1864	2d "	.....	" " " "	.....						
1,000,000	7			1873		.....	Cumberland Valley.	.....	52	1,218,300.00		160,511.56	51,101.56	\$33,250.24
500,000	0			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00			
350,000						.....	Eastern Railroad.	.....	436-10	3,345,000.00		663,578.79	282,077.84	\$234,133
740,000	7				1st mortgage.	.....	East Ten. & Virginia..	.....	130	625,450.00		30,897.30	19,692.30	
88,000	10			1869	1st "	.....	Essex Railroad.	.....	20	740,000.00				
400,000	7			1861	1st "	.....	Evansville & Crawf'd'le	.....	109	2,228,657.00		245,970.42	136,061.90	\$133,281.45
200,000	10			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.	.....		2,540,000.00		681,162.52	213,837.81	3 per cent.
						.....	Fox River Valley.	.....	33	800,000.00				
100,000	0				1st mortgage.	.....	Fair Haven Branch.	.....	15	300,000.00		50,321.33	14,823.33	\$166,240.00
100,000	7				1st "	.....	Georgia, RR & Banking Co.	.....	233	4,156,000.00		1,068,202.52	357,689.42	\$166,240.00
300,000	7				1st "	.....	G't Falls & Conway R.R.	.....	90	4,101,550.00		2,068,836.00	14,207.07	8 pr. ct.
4,000,000	0 1-9			1858	1st "	.....	G't West'n R.R. of Cen.	.....	281 1/2	4,101,550.00		339,196.50	176,529.98	
2,000,000	7			1869-70	1st "	.....	Housatonic Railroad.	.....	74	2,000,000.00		1,924,382.44	718,037.40	
1,812,000	7			1860	2d "	.....	Hudson River.	.....	144	4,000,000.00				
12,885,000	7			1875	3d mortgage.	.....	" " " "	.....	144	4,000,000.00				
4,115,000	7			1876	1st "	.....	Illinois Central R. R.	.....	704	18,453,376.00		1,476,035.27	1031,499.08	7 pr. ct.
3,000,000	7			1860	Freeland.	.....	Indiana Central.	.....	72 1/2	3,558,376.00		351,871.00		3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.	.....	" " " "	.....						
700,000	7	Jan. & July 1		1862	2d "	.....	" " " "	.....						
50,000	7				1st "	.....	" " " "	.....						
700,000	7				1st mortgage.	.....	Iron R. R.	.....	13	123,700.00				
						.....	Kentucky Cen. 2d Div.	.....		719,500.00				
218,000	7				1st "	.....	Knoxville & Kentucky.	.....	32	166,000.00		23,233.59	14,233.59	
1,000,000	7			1866	2d "	.....	Laurens (S. C.) R. R.	.....	184	300,000.00		50,924.71	14,149.13	\$1,000
1,000,000	7			1875	3d "	.....	Louisville & Nashville.	.....	12 3/5	2,697,080.00		567,236.57	162,277.50	10 pr. ct
2,000,000	6				1st "	.....	Mad River & Lake Erie..	.....		2,697,080.00				
2,500,000	7			1868	1st "	.....	Manchester & Lawrence.	.....	26	1,000,000.00				\$24,000
2,000,000	7 and 8			1874	2d "	.....	Maricetta & Cincinnati..	.....						
60,000	7			1867	1st "	.....	" " " "	.....						
420,000	8				1st mortgage.	.....	Mexican Gulf R. R.	.....	27	600,000.00		19,752.42	55,501.74	7 pr. ct.
329,000	8			1881	1st "	.....	Milwaukee & Horicon.	.....	30	922,500.00		7,707,348	3,609,481	2 pr. ct. 6m
320,000	8			1868	2d "	.....	Mineral Point R. R.	.....	32	23,067,400	14,763,807			3 pr. ct. 6m
6,000,000	6			1884	1st "	.....	" " " "	.....	32					
500,000	7					.....	Mobile & Ohio.	.....	497	10,000,000.00		283,498.96	168,802.24	7 pr. ct.
2,356,000	7	May & Nov.	N. York	1860	1st mortgage.	.....	Nashua & Lowell R. R.	.....	15	600,000.00				
8,812,600	6	June & Dec.	N. York	1864	Con. till 1850.	.....	New Haven & North'm'n	.....	55	922,500.00				
3,000,000	7			1864	1st mortgage.	.....	New York Central.	.....	535	23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
926,000	7			1864	2d "	.....	" " " "	.....	133	5,717,100.00		1,040,393.26	64,678.71	\$37,692.30
411,700	0			1863	1st "	.....	N. Y. & Harlem R. R.	.....						
500,000	6				1st "	.....	N. Y., Prov. & Boston..	.....	50	1,580,000.00		245,713.00	51,544.40	
300,000	6				2d "	.....	N. Lon., Will'm'tu & Pal.	.....	66	1,700,000.00		120,571.50		\$25,000
						.....	" " " "	.....						
1,500,000	8					.....	Pontchartrain R. R.	.....	5	500,000.00		116,795.00	366,118.80	7 pr. ct.
1,000,000	6			1873	1st mortgage.	.....	N. O., Opel's & Gr't West.	.....	62 1/2	6,00,000.00		1,007,666.48		
2,000,000	6			1873	2d "	.....	N. Y. & New Haven.	.....	103 1/2	3,000,000.00				
1,500,000	7			1885	3d "	.....	North Western Va. R. R.	.....						
3,000,000	5			1859	1st mortgage.	.....	" " " "	.....						
419,300	6					.....	Northern (N. Y.) R. R.	.....	118	2,000,000.00		600,000.00		7 pr. ct.
221,800	5			1877		.....	North Missouri R. R.	.....	19 1/2			23,176.74	88,458.56	2 1/2 pr. ct.
				1860		.....	Norwich & Worcester RR	.....	60	2,111,500.00		304,236.33		
						.....	" " " "	.....						
400,000	6					.....	Ogd'nsh'g, Clay't'n & Rome	.....	94			289,690.10	137,875.93	5 pr. ct.
1,200,000	6			1866	1st mortgage.	.....	Ontario, Simcoe & Huron	.....	89 3/4	2,957,500.00		276,539.02		
300,000	8			1875	2d mortgage.	.....	Orange & Alexandria R.R.	.....						
300,000	8			1868	1st mortgage.	.....	" " " "	.....						
750,000	6			1872	1st "	.....	Peoria & Bureau Val. R. R.	.....	47	1,500,000.00				6 pr. ct.
800,000	7					.....	" " " "	.....						
1,260,000	6			1861	1st mortgage.	.....	Philadelphia & Trenton..	.....	28 1-5	1,000,000.00				
				1864 to 1874	1st "	.....	Portsmouth & Concord..	.....	47					
						.....	Potsdam & Watertown..	.....	76	2,000,000.00				
				20 years.	1st mortgage.	.....	Rutland & Washington..	.....	62 1/2	950,000.00		68,525.42		
						.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00				
500,000	6				1st mortgage.	.....	Salem & St. Louis R. R.	.....	168 3/4	400,000.00				
250,000	6				1st "	.....	Sud'sky, Mans'd & New'k	.....	116				19,050.64	
					2d "	.....	Sullivan Railroad.	.....	26	500,000.00		75,246.06	17,378.08	
						.....	" " " "	.....						
317,000					1st mortgage.	.....	Tennessee & Alabama.	.....	145			39,886.44		11m. 12 pr. ct
300,000						.....	Terre Haute & Richmond	.....	73	1,294,450.00				
198,000				1861	1st mortgage.	.....	Toledo, Wabash & Western	.....	212					
262,500				1840	2d "	.....	Troy & Boston.	.....		1,000,000.00				
				1875	3d "	.....	" " " "	.....						
2,500,000					1st, 2d, 3d "	.....	Vicksburg & Jackson.	.....	46			322,048.60	165,076.04	2 pr. ct.
						.....	Virginia & Tennessee.	.....	215	3,000,000.00				
596,000	7				1st mortgage.	.....	Westchester (Pa.) R. R.	.....	31	165,000.00				
200,000	7				2d "	.....	Wilmington & Manchester	.....	171					
						.....	Winchester & Potomac..	.....	32					
						.....	Worcester & Nashua..	.....	45 69.					



Concluded from page 531.

icans." The report enumerates at considerable length the various localities examined by Col. Emory's party and others, of which there could be no doubt.

In view of these authorities, it is hoped that those who will not believe upon any evidence will be content in their own incredulity. The most authentic reports of these immense mineral resources have been used as authorities against their existence. The authors of these denials either have never read what they pretend to quote, or think no one else has. The Hon. T. Butler King, who was the first to reveal to an incredulous public the wonders of the California gold mines, has had the singular good fortune to be also the first to publish a corrected and authentic information relating to the silver treasures of Arizona. His report upon the resources of the new Territory has all the charm to the reader that his California report had, and its brilliant predictions will be as fully realized.

The agricultural regions of Arizona, the present condition, population, necessities, and most noted localities, will be referred to in future notes. S. M.

#### PARCHMENT PAPER.

At the Royal Institution, on the 3d inst., the Rev. J. Barlow gave a lecture on this subject. Mr. W. E. Gaine has discovered the remarkable fact, that by a momentary immersion of paper in strong sulphuric acid, diluted with half its bulk of water, and allowed to cool, and then instantly washing it free from acid, first in plenty of water, and then in weak ammonia, it becomes endowed with such extraordinary tenacity, that whereas a band of the original paper, of about an inch in width, breaks under a weight of seven or eight pounds; in its modified condition it will support nearly a hundred weight. The lecturer stated that Messrs. De La Rue & Co. had entered into an arrangement with the discoverer to introduce it into commerce, where, from its almost indestructibility, it will doubtless supersede parchment in many of its applications. Specimens of engravings were exhibited which had been so treated after having received the impression: the acid had in no way injured the lines of the engraving, whilst the great contraction which the paper underwent, gave a delicate softness and sharpness to the picture. Several photographs were likewise exhibited which had been printed on this parchment paper, as it is called, the peculiar hard nature of the surface enabling photographers, the inventor states, to obtain beautifully rich tones with far less expenditure of nitrate of silver than at present.

Mr. William Crookes, in a communication to the *Journal of the Photographic Society*, says:—

"On seeing the really wonderful change which had by this simple means been wrought in an engraving, the thought instantly occurred to me, what would be the effect of treating a finished photograph in this manner? We know of many instances in which a strong acid exerts apparently less energetic action on bodies than the same acid diluted; and it was just possible that the metallic compound, whatever it may be, constituting the dark part of a positive paper photograph, might pass unscathed through the ordeal; the idea was at all events well worth putting to the test of experiment, and, accordingly, the same night, strips of photographs, selected as samples of different tones of printing, and various

kinds of paper, were passed through the acid according to the plan above stated.

"The result was one which I had certainly not anticipated: the color and tint of the picture, even in the most delicate half-tones, remained perfectly intact, while the powerful yet uniform contraction of the paper added considerably to the sharpness; the paper was, besides, suddenly gifted with such great strength, that not only would it bear the roughest handling during the washing operation, without even the possibility of tearing it; but at any after-time, when finished and mounted, it would bear hard rubbing with soap and water and a wet cloth, with out the slightest roughening or abrasion of the surface, if it were sufficiently dirty to render such a mode of treatment advantageous. Added to this, the surface (of an unalbumenized print) assumed a peculiar glossy appearance, giving a richer finish to the picture, without the glare which is so much objected to in albumenized pictures. Another effect, which time alone can decide whether or no it may be added to this long list of advantages, was this: a picture which was fading rapidly, was so treated on one-half only; there was a powerful odor of hydro-sulphuric acid evolved, and certainly there has been no further fading since, although the short space of time which has elapsed since trying the experiment, makes it difficult, as yet, to appreciate any difference between the two halves as regards their intensity.

**INTERESTING DECISION TO RAILROAD CARRIERS.**—The Supreme Court of New York has just decided a case of considerable interest to carriers, being that of *Edward Hempstead vs. The New York Central Railroad Company*. The defendants are engaged in the transportation of passengers and freight to and from Albany and Buffalo, these being the termini of their road. On the 13th of February, 1855, the plaintiff and his assignor delivered at Detroit, Michigan, to the Union Express Company, (an association formed for the purpose of taking charge of packages, and forwarding the same to such points as desired,) "319 kegs and 15 barrels of butter, to be forwarded to Darling, Albertson & Rose, Front street New York; butter marked I. A. B., 17 Water street New York." On the 26th of February, 1855, the Union Express Company delivered the same at Windsor, Canada West, to the Great Western Railroad Company, a line of railroad engaged in the transportation of passengers and freight between Windsor and the suspension Bridge at Niagara Falls. The Great Western transported the same to Niagara Falls and on the 2nd of March, 1855, delivered the same to the defendants. The defendants transported the same over their road, and on the 6th of said March, delivered the same to Hudson River Railroad Company. The latter company transported the same to the city of New York, but did not deliver 142 kegs and 15 barrels to the consignees, Darling, Albertson & Rose. After a careful review of the case, Judge Davies ordered judgment to be entered for the defendants, saying, that in no point of view could he see ground for holding them liable.

#### MONETARY AND COMMERCIAL

The appearances of the money markets of the country to a superficial observer, are no better than they were at our last dates. We continue to hear of suspensions in all the principal cities. Dunlevy, Drake & Co., of this city, closed their doors on Monday. They propose to receive checks on themselves in payment of all discounted paper. Hutchings & Co. and W. E. Culver & Co., of Louisville, have suspended. Swift, Ransom & Co., of New York, Swift Brothers & Johnston, of Chicago, J. H. Lucas & Co., of St. Louis, Clark, Dodge & Co., of New York, and their branches in other Eastern cities, have suspended. We hear of a number of mercantile failures at the East. There is, however, in the general current of events, reason to hope that the worst of the crisis is over, and that the coming months will be devoted to the work of retrenchment. The 3d and 4th of the month passed here with less difficulty than was anticipated.

Exchange on New York declined from 5 to 4 per cent. premium, but was a little wavering yesterday, with a disposition to increase again to 5 per cent.

The merchants and manufacturers of Boston have held a meeting, in which they called on the banks to aid them in sustaining their credit, by discounting to the amount of 10 per cent. of their capital.

In New York stocks had recovered a little, and there was inquiry after prime paper.

In Philadelphia stocks are almost unsaleable. There is no money seeking investment.

#### SALES AT THE NEW YORK STOCK BOARD—Oct. 29.

\$4,600 Ohio State 6's, '60.....	75 3/4
1,000 Kentucky 6's.....	85
4,000 Indiana State 5's.....	70
2,000 Missouri State 6's.....	64 1/2
1,000 Virginia 6's.....	78
600 N. Y. Central 7's.....	80
2,500 Illinois Central R. R. Bonds.....	69
1,000 Galena & Chicago R. R. 2d Mort. Bonds.....	65
1455 shales New York Central.....	50
50 " Del. & H. C. Company.....	90
50 " LaCrosse & Milwaukee.....	6 1/2
21 " Penn. Coal Co.....	54
1150 " Cumberland Coal Co.....	5
115 " Milwaukee & Miss.....	13 1/2
100 " Erie.....	10
15 " N. Hav. & Hart.....	100
500 " Reading.....	26
10 " Mich. Cent.....	31 1/2
225 " Harlem R. R. stock.....	7 1/2
50 " Mich. S. & N. Ind.....	11
20 " do do do pref.....	25
50 " Panama.....	64
200 " Illinois Central.....	8
8 " Cleve., Col. & Cin.....	70
50 " Galena & Chicago.....	55
100 " Cleveland & Toledo.....	24 1/2
50 " Chicago & Rock Island.....	59

**RAILROAD EARNINGS FOR AUGUST.**—The earnings of the Milwaukee & Mississippi Railroad Company are: For August, 1857.....\$60,616 For corresponding month last year.....56,564

Increase.....	\$24,052
The earnings of the Michigan Central Railroad for August were:	
1857.	1858.
Passengers.....\$120,387 08	\$146,326 57
Freight.....88,219 12	112,621 45
Miscellaneous.....6,294 73	6,801 37
Total.....	\$221,353 98
	\$265,549 39
	221,353 98

Decrease.....\$44,295 91  
The receipts of the Chicago & Rock Island Road for August were \$142,265 47, against \$176,794 24 last year.

¶ The gross receipts of the La Crosse & Milwaukee Railroad for the month of August were as follows, viz:

Eastern Division:	
Passengers.....	\$16,641 22
Freight.....	25,385 40
Express.....	739 72
Total.....	\$42,666 34
Northwestern Division:	
Passenger income.....	\$278 44
Freight.....	219 03
	497 47
Watertown Division:	
Freight.....	\$5,139 65
Passengers.....	2,519 98
Express and mails.....	759 17
	8,068 60
Total.....	\$51,232 41



[From the Journal of the Franklin Institute.]  
ON SUPERHEATED STEAM.—BY THOS. PROS-  
SER, C. E.

The subject of superheated steam is far from being a new one, but inasmuch as another of those oft recurring efforts to which an imperfect knowledge of the physical laws which govern it is now being made, I have ventured a few more words of advice, in the hope of staying the delusion somewhat, to prevent a useless expenditure of time and of money, with a *fearful sacrifice of life itself*, which must inevitably result from the extensive adoption of superheated steam, produced in the manner generally contemplated.

The superheated is probably the only state in which steam should be admitted into the cylinder of a steam engine, for the purpose of fully developing its mechanical effects in the most economical manner, provided that can be done without increasing the danger which necessarily attends its use in any state.

Instead of superheated, however, the subject has been treated more like supernatural, for if the *gain* (that is the term applied) observable when steam is so used, is really attributable to it as the primary cause, we have an effect from a cause which is in no way adequate to its production, so far at least as our knowledge of the physical nature of steam extends; the effect therefore is supernatural.

It would be no difficult task to show the delusion under which the experimenters themselves have labored, in all those cases which are relied upon to prove the enormous *gain* obtained by using superheated steam; but it would be an endless repetition. I prefer, therefore, to state what we do know, if any reliance is to be placed on the experiments of Regnault and others, viz: That all dry, gaseous bodies are expanded nearly alike by the absorption of the same total amount of heat, and that there exists no reason whatever for supposing that steam acts otherwise when superheated.

There is no dogma better supported by inductive reasoning than this, as a physical fact, for although there are no experiments which entirely agree with it, the differences are so small as to be within the possible errors of experiments of so much delicacy. At all events, even the experiments themselves, however selected, do not justify the claims set up in favor of surcharged steam, hot air, carbonic acid gas, alcohol, or ether, and the failure of all of them points to the one same cause.

If steam is an exception to the general rule we have no reliable experiments which prove it, for those which have been supposed to do so are of no value whatever.

The solution of the difficulty is simply this: Superheating the steam prevents its condensation in the cylinder, and therefore avoids a loss; that is all which it can do, and enough, too, for that loss is so enormous that the advocates of the air-pump condenser are compelled almost to ignore it, or to acknowledge this new "spirit" of evil and of error. Of evil because of the extreme danger attending its production, and of error because aiming at the curing of an evil, instead of preventing its existence, for, says the good old proverb, "*prevention is better than cure.*"

When we reflect upon the fact that the air-pump which is used to exhaust receivers in the production of ice, and that the air-pump of a steam engine condenser are of precisely the same character, need we be surprised (or should we not be surprised if it were otherwise) that a chilling effect is produced upon

the inside of a cylinder at a high temperature, and ever exposed to its influence? Surely the steam which comes in contact with the cylinder and piston must be condensed, and to some extent lose its mechanical power. That the interior, as well as the exterior surface of the cylinder has to be warmed, is self-evident; but there is a vast difference between doing it by the condensation of the steam at a time when it should be exerting its utmost mechanical effect upon the piston, and doing it through the medium of the superheat while the steam itself is left in full power, uncondensed.

*Superheated steam therefore prevents waste*; but the processes by which it is generally proposed to superheat it are attended with imminent danger, not only on account of the rapid corrosion of the metal in contact with the steam while being superheated, but also on account of the great immobility of the particles of steam (when so superheated), and their low additional specific heat, which prevents absorption as fast as the metal will allow the heat to pass, and thus renders it liable to become red hot.

Now, expanding high pressure steam before admitting it into the cylinder, has precisely the same beneficial effect in preventing condensation, and is not attended with the danger of superheating; but then comes the bug-bear of *wire-drawn steam*. Now, what does it matter if the steam is throttled, provided we get all the power required from it? If *none* is condensed in the cylinder, all the power in the steam has been utilized. The dense steam will not cost more to make, in proportion to its value, than any other less dense.

Steam at 200° C. has a pressure of 15.38 atmospheres, and its *total heat* amounts to 667.5° C., according to Regnault. By throttling so as to wire-draw it, as it is called, it assumes the state of *superheated steam*, in consequence of having more heat than is contained in normal steam when so expanded, while at the same time it is deficient of water or density. Supposing it has retained its original amount of *total heat* without any cooling, excepting that occasioned by expansion to four times its volume, the temperature will fall from 200° C. to about 158.3° C., while the density and pressure will be one-fourth of the original steam. Clearly this must be *superheated steam*, for normal steam has no such proportions as we have assumed between its total heat, density, and pressure. But, allow this expanded steam to cool down to the point of deposition, which is about 140° C., and pressure 3.576° C., and the same authority as before quoted will inform us that the total heat in such steam is but 649.2° C., having lost 18.3 C. (=667.5—649.2) of total heat by the reduction of its temperature from 200° C. to 140° C. (=60 per cent.) This loss of total heat, which must go into the metal of the cylinder and piston before any condensation can take place, amounts to about 1-36th of the total heat contained in the steam before expansion, and is abundantly sufficient to prevent any condensation in the cylinder, working with ordinary and further expansion.

The mechanical effect of the expansion between the boiler and cylinder is lost, but not more so than if it had never been created, since it costs no more to produce high than low pressure steam.

The same weight of fuel will evaporate the same weight of water under all pressures, and, therefore, the hotter the water is the more rapidly and effectually will it abstract heat from the fuel, for it really contains more of it,

and as the fuel is the only source of supply, there must be greater economy in burning it under hot than cold water, and this agrees with Leslie's experiments, which show that water, at the boiling point abstracts heat five times more rapidly than it does at the freezing one.

Of course the boiler must be stronger in proportion to the elasticity of the steam to be generated in it, but that need form no objection now, as the use of cast steel instead of iron will fully compensate for the difference.

Cast steel boiler plates are now being used by the English government, and it is to be hoped that this element of safety will ere long be adopted by our own, for with this material a boiler can be made which *can not* be burst by mere steam pressure. The author has one of iron which he thinks may claim the same immunity—at all events, he is willing to test it against any other in the United States.

Although, therefore, there are no objections to the making of this high pressure steam, there are some to the using of it, without *letting down*.

In the first place, it may blow off the cylinder cover of a good many engines, such as are now built, if it did not burst the steam chest before reaching it, or even the cylinder itself.

In the second place, it may hurn up hemp packing, for the temperature is greater than any cooking oven (200° C.=392° F.) although not half so hot as air and surcharged steam has been done at.

Nevertheless, if high pressure steam is required in the dry state, it can be obtained with safety and simplicity from a multitubular boiler, similar to the one which supplied steam to the fire engine exhibited in the Park some time since, which raised steam from cold water in five minutes from the time of lighting the fire in the regular safe and honest way, with the tube plate sufficiently covered by the water, and not in that extremely dangerous manner which many others do it, by first heating the metal to almost a red heat, and then projecting the water upon it.

The steam from this fire engine boiler has, moreover, after having been at work some time, left the exhaust pipe and heater perfectly dry.

The proportions of such a boiler as will give the required results, appear to be about 1 foot of grate to 60 or 70 feet of recipient heating surface, of which at least one-third should be above the water line, and in among the steam for the purpose of drying it through the medium of the hot gases after they have passed through the water, and have become sufficiently cooled to be used with safety for that purpose. These are equal to the best locomotive boiler proportions, but the application is very different, as the boiler is upright, and the uptake is immensely expanded just below the water line, at the instant the gases are in a state of intense ignition.

I have stated nothing in this communication but simply physical facts, and yet I know very well that a majority of engineers of the present day will condemn them as heretic, and probably knock them on the head with the sledge hammer of *practical experience*. If you are right, said one of our most eminent engineers, we are all wrong. Even so. But *truth*—ah!—*will prevail*, which I intended to prove by some poet, but, having forgotten his poetry, will merely reiterate, *will prevail*, without, however, committing myself to the precise time when.



**KEOKUK & NEBRASKA R. R.**

The following are the articles of incorporation of the above company under the general laws of the State of Iowa:

In conformity to chapters forty-three and forty-four of the code of Iowa, approved February 5th, A. D. 1851, we, S. R. Curtis, R. P. Lowe, D. T. Brigham, J. W. Rankin, Edward Kilbourne, C. F. Conn, H. T. Reid, Charles Parsons, A. Bridgman, Wm. Leighton, E. R. Ford, P. W. Potter, H. W. Sample, James L. Estes, J. M. Love, W. W. Belknap, Hawkins Taylor, S. S. Billings, John M. Hiatt, John W. Cleghorn, A. B. Chittenden, George B. Smyth, of the city of Keokuk; D. F. Miller, Edward Johnston, J. C. Walker, of Fort Madison; Edward Manning, George G. Wright, J. H. Bonney, Augustus Hall, of Keosauqua, and Rob't McCabe, of Burlington, do hereby incorporate ourselves, and all other persons who may become members of the corporation hereby created, into a body corporate and politic, with all the powers, rights and privileges granted by said act, and by the following articles of incorporation:

ART. 1. The name and style of this incorporation shall be The Keokuk & Nebraska Railroad Company, and by that name shall have perpetual succession—may sue and be sued, and may have a common seal, which it may alter or renew at pleasure.

ART. 2. The said corporation shall have power to procure the right of way, survey, locate and construct, and during its construction to maintain a railroad with double or single track, and with such appendages as may be deemed necessary for the convenient use of the same, from some point on the Keokuk Fort Des Moines & Minnesota Railroad, in Van Buren county, in the State of Iowa, through the southern tier of counties to the Missouri river. The Directors may prescribe the manner in which said road shall be used by what force the carriages thereon may be propelled, regulate the time and manner in which goods, effects and passengers may be transported and carried on the same, and the rate of toll or fare for the transportation of property or passengers thereon.

ART. 3. The capital stock of said corporation shall be eight millions of dollars, which shall be divided into shares of one hundred dollars each; to be subscribed and taken under the direction of the Directors of said corporation. The capital stock may at any time be increased or diminished to such sum as may be deemed necessary to carry out the objects of the corporation.

ART. 4. The Directors may require payment of the stock subscribed in such installments (not exceeding ten per cent. thereof) and at such times (not oftener than one installment every sixty days) and on such conditions as they shall deem proper; and they shall give at least thirty days' notice of the time and place of payment in at least three newspapers published in the State of Iowa, one of which shall be published in Keokuk.

And the company shall have a lien on all the stock subscribed, or all unpaid installments, which it may enforce by the sale of the stock, to be made by the Secretary after the same has been due thirty days, and after thirty days' notice of the time and place of sale have been given in some newspaper published at the principal place of business of the corporation; or the corporation may, at its option, sue the stockholders for said unpaid installments.

ART. 5. The affairs of said corporation

shall be managed by a Board of fifteen Directors, who shall be stockholders in the corporation; but the number of Directors may at any time be increased by a vote of the holders of a majority of the stock, to any number not exceeding twenty-one. The persona herein before named shall constitute a temporary Board of Directors, and shall hold their offices until successors are elected as hereinafter provided, and in accordance with the provisions of this article. The Directors shall make a written report to the stockholders at their annual meeting, which report shall embrace a full statement of the condition of the affairs of the company.

ART. 6. The annual election of Directors shall be held on the second Monday of June of each year, at the city of Keokuk: Provided, if such election be not held as aforesaid, it may be held at any subsequent period, of which at least three weeks' notice shall be given in three newspapers, one of which shall be published at Keokuk. The persons receiving the highest number of votes shall be Directors, to succeed those whose term of office shall have expired. The Directors shall choose from their own number a President, Vice President and Treasurer. They may also appoint such subordinate agents, officers and servants as the business of said corporation may require, and allow them a suitable compensation, who shall hold their office during the pleasure of the Directors of the said corporation. A majority of the Directors shall constitute a quorum for the transaction of business, and they shall fill all vacancies that may occur in their body for the unexpired term for which they were elected. They may make such by-laws, rules and regulations as they may deem expedient for the management of the affairs of the corporation, which shall not be contrary to law or these articles of incorporation.

ART. 7. Each stockholder shall be entitled to vote in person or by proxy duly authorized, one vote for each share of stock he may own at the commencement of each election.

ART. 8. A journal of all proceedings, by-laws, rules and regulations, shall be kept by the Secretary, and an account of all receipts and expenditures shall be kept by the Treasurer, for the use and inspection, at all times, of the company.

ART. 9. This corporation shall have power to make contracts, acquire and transfer property, personal and real, and in all things pertaining to the business of the corporation, shall possess the same powers as private individuals.

ART. 10. The private property of the stockholders is hereby exempted from liability for the debts of the company, except to the amount of the unpaid installments of any stockholder. The stock of the said incorporation shall be transferable under such rules and regulations as may be deemed expedient by the Board of Directors.

ART. 11. For the purpose of facilitating the construction of the works contemplated in these articles, the said corporation may negotiate a loan or loans of money for any amount required for such purpose, and may pledge all its property, real and personal, and all its rights, credits and franchises, for the payment thereof: Provided, such amount, together with the other debts of the company, shall not exceed two-thirds of its capital stock.

ART. 12. No location of the road shall be made until an election of a Board of Directors by the stockholders; and the first election of Directors by the stockholders shall be at

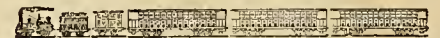
such time and place as the temporary Directors may determine, of which they shall give the same notice as is required for the annual election, and the Directors then elected shall hold their office until the next annual election thereafter.

ART. 13. This corporation shall commence on the 25th day of April, A. D. 1857 and continue fifty years, and may be renewed according to the provisions of the code of Iowa, "Approved February 5th, A. D. 1851," chapters 43 and 44.

ART. 14. The principal place of transacting business of said corporation shall be the city of Keokuk, Lee county, and State of Iowa.

ART. 15. These articles may be altered or amended by a vote of the holders of a majority of the stock of the corporation, except articles two and eleven, which shall not be materially altered without the unanimous vote of all the stockholders.

At a meeting of the incorporators above named, in Keokuk, on the 25th April, 1857, R. P. Lowe was elected President; William Leighton, Vice President; E. R. Ford, Treasurer; C. F. Conn, Secretary; and Robert McCabe, Superintendent.

**PERU & INDIANAPOLIS R. R.**

Per Logansport, Wabash, Rochester, and Indianapolis.

Passenger Train leaves the Union Station at Indianapolis daily, Sundays excepted, at 1 o'clock P. M., after the arrival of the Trains from the West, South, and East arrive at Peru at 5.45 and 6.15 P. M.

Leaves Peru daily, Sundays excepted, at 6.00 A. M. for Indianapolis, connecting with all Trains for South, East, and West.

Trains going North connect with the Toledo, Wabash and Western Road for Lagro, Huntingdon, Wabash and Toledo; also Logansport and Lafayette.

Passengers coming South from T., W., & W. R. R make close connections at Peru for Indianapolis.

JAMES H. MILLS, Sup't.  
L. N. ANDREWS, Gen. Fr'ght. Ag't.  
Indianapolis, Sept. 16, 1856 [mh29-1v.

**To Railroad Contractors.**

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great Wabash River, in White county and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.

**Locomotives and Passenger Cars  
FOR SALE CHEAP.**

1 LOCOMOTIVE, made at the Boston Locomotive Works, four and one-half feet driving-wheels, in good running order.

1 Locomotive, made at the New Jersey Locomotive Works, twenty-four tons, five feet driving-wheels, sixteen by twenty-four inch cylinder.

3 Passenger Cars, for sixty passengers; one has never been used, and the others only for a short time.

The two Locomotives and two of the Cars are at Lexington, and one car at Maysville, Ky., and can be seen on application to W. M. Whittlesey, at the former, and A. M. January, at the latter place.

The above will be sold very cheap for cash or short approved paper. For further information apply to

CAMMANN & CO.,  
oct-4t No. 36 Wall street, New York.



## The Polytechnic College Of the State of Pennsylvania.

WEST PENN. SQUARE.

The Polytechnic College, incorporated by the Legislature, 1853, on the plan of the industrial Colleges of Paris and Berlin, affords a thorough professional education in Civil Engineering, Mining Engineering, Mechanical Engineering, Industrial, Analytical, and Agricultural Chemistry, Metallurgy and Architecture.

Ample facilities are provided for Field and Laboratory Practice, and Assistant Engineers may perfect themselves in any branch of their profession.

THE FIFTH ANNUAL SESSION of the College will begin on MONDAY, SEPT. 21, 1857.

Apply to DR. A. L. KENNEDY, Pres. of Faculty Polytechnic College, Philadelphia.  
Aug. 20—6t

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

jy30

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannies, of Gowanda, Erie County, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## Patent Self-Adjusting Lantern!

THE MOST APPROVED LANTERN FOR  
RAILROADS, STEAMBOATS,  
AND FOR GENERAL PURPOSES.

WITH many other advantages over all others, this Lantern is so constructed as to be instantly opened the globe taken out to be cleaned, or if broken a new one replaced, thus obviating a resort to Lantern menders.

Master mechanics and others may at all times, and at a trifling cost, have a supply of signal and white globes at hand, thus readily keeping their Lanterns in order. For sale, wholesale, and retail, by  
GRAY, HEMMINGWAY & BROTHERS,  
dec. 11 No. 14 Main street, Cincinnati, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 1y 119 Walnut st., Odd Fellows' Building.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 52 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
feb19-1m 9 South William street, N. Y.

## SAFETY & ECONOMY.

JAMES HARRISON JR.'S

Automatic Steam Whistle,

FOR LOCOMOTIVES.

PATENTED APRIL, 1856.

THIS invention renders absolutely certain the sounding of a sufficient alarm at every crossing, or other point or which it is set. It is strong and simple, and not liable to derangement. It does not interfere with the ordinary use of the whistle in giving other signals, etc. It can be applied with little expense on old as well as new engines. For further information apply to  
JAMES HARRISON, Jr.,  
dec11 Second avenue, corner of 22d street, N. Y.

F. W. RHINELANDER.  
JAMES A. BOORMAN. EDWIN A. POST.  
RHINELANDER, BOORMAN & CO.,

## RAILWAY AGENTS

AND

## COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

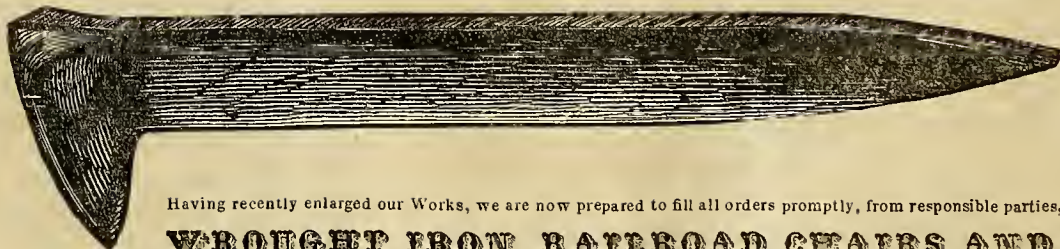
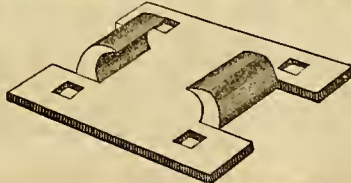
Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sberman & Co., Messrs. Stillman, Allen & Co.  
feb5-1y

## CINCINNATI WROUGHT-IRON

# RAILROAD CHAIR & SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the head where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,  
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FREIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,  
Sup't Terre Haute & Richmond R. R.

## PAGES

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatcher Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, PITTSBURGH, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	4½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,  
Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,  
Ag't Cin. and St. Louis Omnibus L  
Office No. 2 Burnet House.

1856.

857.

Summer Arrangement.

1857.

## Cincinnati, Hamilton &amp; Dayton RAILROAD, [TRUNK LINE.] FOR THE NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, PHILADELPHIA, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPOET, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connect—at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOET EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

## Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

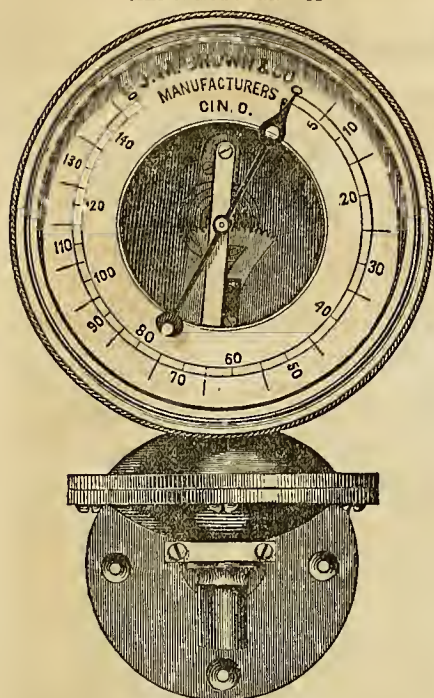
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.



**J. M. BROWN & CO.,**

MANUFACTURERS OF

**IMPROVED  
Corrugated Steel Spring Gauges,**FOR  
**LOCOMOTIVES AND STATIONARY ENGINES.**

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

**J. M. BROWN & CO.,**  
250 East Front street, Cincinnati, O.

**Prosper's Patent  
LAP-WELDED  
IRON BOILER TUBES,**

every article necessary to  
**DRILL THE TUBE-PLATES**

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Toggles.

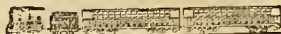
Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

**Frank T. Foster,**

Manufacturer of every variety of Railroad Traveling Baggage Checks of Copper, Brass, German Silver and Leather, also, Key Number and Checks for Hotels and Restaurants. Samples sent to persons desiring the same. All orders addressed to No. 37 South Third St., Philadelphia, promptly attended to.

N. B. National Bunting and silk flags of all sizes made as heretofore, and Engineering tents for encamping.  
June 24, 3 mos.

**Norris' Locomotive Works.****PHILADELPHIA.**

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy. 27. **RICHARD NORRIS & SON.**

**IRON BOILER FLUES  
PASCAL IRON WORKS.****MORRIS, TASKER & CO.,**

Manufacturers of

**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES.**  
From ¼ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
**PHILADELPHIA.**

**RAILROAD IRON.****LOCOMOTIVES.**

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '66-2m.]

**R. H. GOODMAN & CO.,**  
no. 7 Wall st., N.

**RAILROAD CAR**

AND

**COACH TRIMMINGS.****DOREMUS & NIXON**

No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**

**IMPORTERS**

OF

**Plain and Figured Mohair Plush-**  
Printed and Unrent do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Enameled Cloth, for seats & backs of Cars**

**ROPE MATTING, Every Width-**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT.**

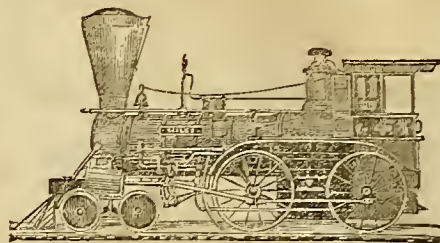
**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in bond for exportation  
sep 18 **DOREMUS & NIXON**

**W. G. ATKINSON,**

**Civil Engineer, Surveyor & Draftsman.**  
**CUMBERLAND, MD.**

**RAILROAD** routes located, planned, and estimated Maps and Reports furnished; Researches made for Coal, Iron, Copper, Lead, or other Minerals, Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid out, and Geological maps prepared.

**CINCINNATI  
LOCOMOTIVE WORKS.**

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap. 20

**MOORE & RICHARDSON.****Railroad Car Findings****BRIDGES & BROTHER,**

64 Courtlandt Street, New York.

**Wheels & Axles, Jaws Boxes, and Casting Fitted**  
**Wrought Nuts, Bolts, & Washers,**  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS**

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.

**ENAMELLED HEAD LININGS****Plush and Curled Hair.**

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Condutors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

**ALBERT BRIDGES,**

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

**ALFRED BRIDGES,**

Late Davenport, Bridges & Co., Fitchburg, Mass.  
to 65.

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,  
**CINCINNATI, O.**

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

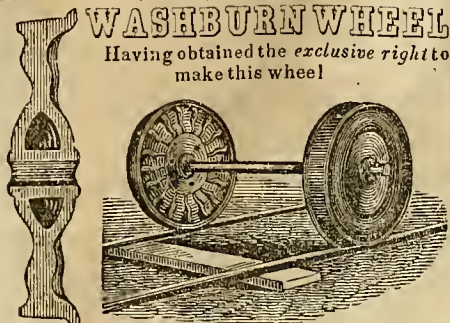
Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.  
Orders thankfully received and promptly filled at the shortest notice.

**ILVER NEAL.** (The highest prize) awarded to best pump steam Pumping Engine exhibited at the Ohio Mechanics' Institute. June 18, 1855



## FULTON CAR WORKS, CINCINNATI, OHIO.

THE Proprietors of this establishment would respectfully call the attention of Railroad Companies in the West and South to their establishment at Cincinnati. Their facilities for manufacturing are extensive, and the means of transportation to the different points speedy and economical. They are prepared to execute to order on short notice, eight-wheeled Passenger Cars of the most superior description. Four or eight-wheeled Baggage Cattle, Freight and Gravel Cars. Also, Crank and Lever Hand Cars, Trucks, Wheels, and Axles fitted.



**WASHBURN WHEEL**  
Having obtained the exclusive right to make this wheel

In Cincinnati, Covington and Newport, they are now prepared to furnish Railroad Companies with that Celebrated wheel, with or without Axles. Also, Journal Oil Boxes of any pattern, and Castings for cars fitted to order at the shortest notice.

Address **KECK & HUBBARD,**  
Fulton Car Works Cincinnati, Ohio.  
Office 62 East Second Street.

## PRATT & FREEMAN.

### PHILADELPHIA Railway Supply Agency

No. 22 1-2 Walnut, and No. 11 Granite St.,  
PHILADELPHIA.

AGENCY FOR THE PURCHASE AND SALE OF  
Locomotives, Passenger, Mail, Baggage, Freight,  
and Hand Cars,

Rails, Bars, Boiler, and Tank Iron, Tubes, Nuts, Bolts,  
Rivets, and Washers, Cast and Wrought Iron  
R. R. Chairs, Spikes, &c.;

Ames, Bowling, and Low Moor Tires, Driving and  
Car Wheels and Axles,

Turn-Tables, with Parry's Anti-Friction Boxes, Steam  
and Hand Water Pumps,

**Machinery and Machinists' Tools,**  
Portable and Stationary Engines, Planing and Borin  
Machines, Lathes, Chucks, Drills, Files,  
and all required

### Railroad Tools,

India Rubber and Steel Car Springs, India Rubber  
Hose, &c., India Rubber, Hemp, and  
Cotton Packing.

Miller's, Radley & Hunter's, Porter's, Williams', and  
others

**LOCOMOTIVE HEAD-LIGHT,**  
Station, Bridge, and Switch Signal Lights, Conductor's  
Arm, Breast, and Hand Lanterns,  
Brass, Bronze, and Silvered Car Side Lamps and Can-  
diesticks, Brass and Tin Glohe and Egg Guarded

### LANTERNS,

Engine, Station, and Signal Bells, Cords and Fixtures  
**Brass Work**

Domes, Escape Pipes, Cylinder Heads and Jackets  
Bands, &c.,

**Steam and Water Gauges,**  
Spring Balances, Cylinder, Gauge, Heater, and Air  
Cocks,

### STEAM WHISTLES,

Cylinder and other kinds of Oil Cups and Feeders,  
Patent Brass and Tin Oil Cans, Copper do.,  
Dudgeon's, Burroughs', and Ball's Patent Jack Screws  
Car and Track Jacks,

Car, Switch, and Bridge Locks, with Chains,  
Burning and Lubricating Oils, White and Yellow Car  
Grease, &c., White, Colored, and Mixed Cotton

### WASTE,

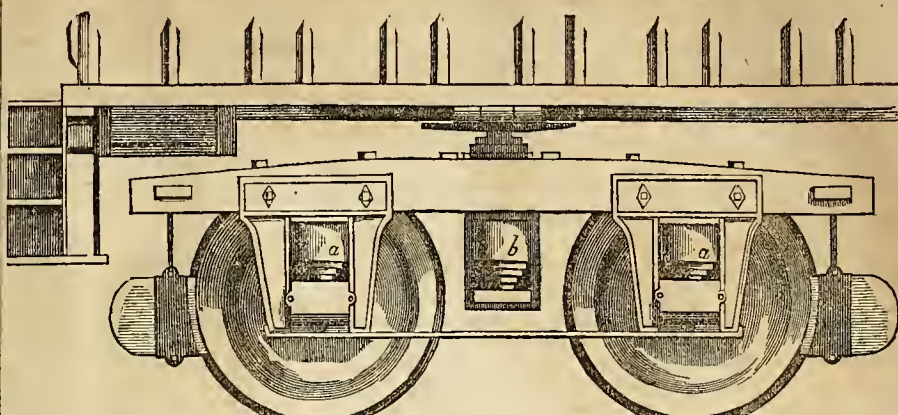
Baggage Barrows and Chocks, Freight Trucks,  
**CAR FINDINGS,**

Also, Superior Car Finding Upholstery, Mounting, &c.

Messrs. P. & F. will give their personal attention to  
all orders received, and will see that they are in proper  
condition, and that they are forwarded with promptness  
and care.

ORDERS SOLICITED AND PROMPTLY  
FILED. oc23-ly

## NEW YORK METALLIC CAR SPRING COMPANY.



TRUSTEES.—CHARLES MINOT, President; COURTLANDT PALMER, Vice President;  
CHAS. ELY, Treasurer; P. G. GARDINER, THOS. B. NELSON.

MANUFACTORY AND SALESROOMS:

Nos. 316, 318, 320, 322 and 324 West 26th Street.—Office, 229 Broadway, New York,

WHERE the Company will have a suite of rooms, one of which will be fitted up for the accommodation of gentlemen connected with Railroads and Car Building, which we should be pleased to have them make their office during their stay in the city, having their letters directed to our care, and affording them every facility for correspondence, etc., free of expense.

During the Summer and Fall of 1856 and the Winter last past, this Company received a large number of order for Springs which they were unable to fill, owing to a want of Steel of a quality such as required for their manufacture. Large orders were sent to Europe for it, which are now coming to hand.

WE ARE NOW ABLE TO SUPPLY WORK IN LARGE QUANTITIES.

The success of these Springs has now been fully established; they have been in constant use upon a large number of roads for the past year. The test during the past winter was a severe one, but their reliability has been even greater than was anticipated. They are now confidently believed to be eminently superior to any other Spring now in use for railroad purposes. Parties who have delayed ordering for the purpose of waiting to hear of their success on other roads, need hesitate no longer, as their utility is now fully established. Orders are now solicited, stating at the same time the kind, size and weight of cars to which they are to be applied.

Address communications to **RICHARD VOSE**, Secretary, N. Y.

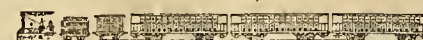
J. DAVENPORT... M. D. WELLMAN... C.

## DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.  
Feb. 167\* JOSEPH DAVENPORT.

## MUSKINGUM WORKS ZANESVILLE, OHIO.



**DOUGLASS, SMITH & CO.**  
WOULD respectfully call the attention of Railroad Companies to their establishment at Zanesville. They are prepared to execute orders, on short notice, for

Passenger Cars of the most superior description, Second Class Passenger, Mail Express, and Baggage Cars; Freight, Cattle, four or eight wheeled Gravel Cars. We manufacture a superior

### CAR WHEEL.

Over 2500 of which are now running on the Central Ohio Railroad, and many of these have been in use on the road over two years, having in that time only three to crack, and two to be renewed in consequence of the wearing of the Chills. We have also commenced the manufacture of the celebrated

### WASHBURN WHEEL,

And are prepared to furnish this wheel, with or without axles. Also, castings for Cars fitted to order at the shortest notice.

### BOILMAN'S PATENT IRON & WOOD BRIDGE.

We are also agents and builders of the above celebrated Bridge. Are now placing upon the piers an iron bridge on this plan over the Muskingum river at Zanesville. We are ready to contract with companies for the construction of this Bridge. All orders addressed

**DOUGLASS, SMITH & CO.,**  
Muskingum Works, Zanesville, O.  
Jan 1.

## S. C. THOMSON & CO

MANUFACTURERS OF

## PATENT PAD LOCKS,

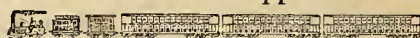
For Railroad Switches, Merchandise Cars

Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1 n2J NEWARK, N. J.

## Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

**H. S. DURAND, President.**  
Robert Harris, Supt.  
Racine, May 15, 1857. ny21

**Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.**

VIA LAWRENCEBURG,

IN connection with the **Ohio and Mississippi Railroad.** Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park St., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-tf 10 Wall St., near Broadway, New York.

**SILVER, GOLD, LEAD,**

[And Other Minerals,

ON THE PROPERTY OF THE

**Sonora Exploring and Mining Co.,**

NEAR TUBAC, GADSDEN PURCHASE, N. MEXICO.

THE most important Mining Company on this continent, at the present time, is probably the SONORA EXPLORING AND MINING CO., of Cincinnati, Ohio, organized March, 1856, by gentlemen of character, experience and familiarity with that country, to explore and purchase good Spanish Titles to the most important Mineral Lands of the richest portion of Sonora, brought within the limits of the United States by the Gadsden Purchase.

The company is now prepared to report the greatest success, having acquired the celebrated Rancho of Arivaca, containing upwards of 17,000 acres of land, by perfect title, with at least twenty-five known Silver Mines thereupon, reported to be very productive. They are also in possession of twenty-four other veins on another tract, and are negotiating for some 200,000 acres of similar lands in the immediate vicinity, valuable not only for their immense mineral wealth, but also for their abundant wood, water, grass, &c., and their healthy and superior climate.

Four companies of United States Dragoons are located on one of the tracts, thus affording ample protection from the depredations of the Apache Indians, the sole cause for the past century of the depopulation of this country and the abandonment of the mines. Protection is also afforded by the influx of a white population, induced by the knowledge of the cropping out of the mineral veins of Mexico at that point.

The great importance of the enterprise, and the mass of information essential to a proper understanding and appreciation of it, forbid the attempt to set it fully forth in a mere advertisement.

The lands are located on the line of the Southern Pacific Railroad, at the most favorable point for a seat of government for the proposed new Territory of Arizona, and of a branch railroad to the Gulf of Mexico. It is the design of the company soon to send a colony of the right sort of men, mechanics and farmers, who are stockholders, to develop and protect their vast interests.

Having a land basis of probably equal value to the stock issued, the security ordinarily desired is thus afforded to the investment, independent of the immense annual revenue from the minerals.

The present issue of stock will be limited to 10,000 shares of \$100 each, a large portion of which is already sold. The residue is now offered for sale to enable the company to complete its valuable purchases and develop its mines.

Parties desiring to become interested will be furnished with printed reports and information at the office of the Company. Their reports are derived from reliable and disinterested sources, and contain matter so astounding to the incredulous, that it would be impolitic to put them all in print at the present time.

EDGAR CONKLING, Ag't for the Company,  
Old Fellows' Building,  
Cor. Third and Walnut streets, Cin'ti. O.

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes. **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

*Transportation Office, Cincinnati, Hamilton & Dayton Railroad.*  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,**  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

**RAILROAD AND OTHER BLANKS,**  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

**Union Works, Baltimore.****POOLE & HUNT,  
Iron Founders & General Machinists,**

ARE prepared with the most simple facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, New York City.  
ap8 ORSUMER SMALL, Boston, Mass.

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C. apr12

**Thorough Bed Stock  
FOR SALE.**

NOT Having any further use for him, I offer for sale my thorough bred roan

**SHORT HORN BULL,**

"TON HUGHES,"

Raised in Scott County, Kentucky, by Thomas Hughes, Esq., and recently owned by the Georgetown College. He is very large, kind and gentle, and in every respect a superior animal. For further information call at Cherry Hill farm, Campbell County, Ky., or address me by letter at Cincinnati, O.

WRIGHTSON.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....OCTOBER 15, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to

WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 34.

#### EDITORIAL.

How a Money Panic was Made in London.....	541
The Great Railroads and the Times.....	641

#### RAILROADS.

Illinois Central.....	542
Columbia R. R., Texas.....	542
Erie R. R.....	542
Cairo & Fulton R. R.....	543
Grayville & Mattoon.....	544
Massachusetts R. R. Dividends.....	546
Chicago & Rock Island R. R.....	546
Rome Gadsden R. R., Ga.....	547

#### MISCELLANEOUS.

Improvements in the Manufacture of Iron and Steel.....	544
Important Opinion of the City Solicitor.....	545

#### MONEY AND STOCKS.

Sales at the New York Stock Board.....	548
Monetary and Commercial.....	548

**HOW A MONEY PANIC WAS MADE IN LONDON.**—Panics have been produced by extraordinary means. That of 1832, in Great Britain, is thus described in Timbs' *"Curiosities of History"*:

In May, 1832, a "run upon the Bank of England" was produced by the walls of London being placarded with the emphatic words, "to stop the Duke, go for gold;" advice which was followed as soon as given, to a prodigious extent. The Duke of Wellington was then very unpopular; and on Monday, the 14th of May, it being currently believed that the Duke had formed a cabinet, the panic became universal, and the run upon the Bank of England for coin was so incessant that in a few hours upwards of half a million was carried off. Mr. Doubleday, in his "Life of Sir Robert Peel," states it to be well known that the above placards were "the device of four gentlemen, two of whom were elected members of the reformed Parliament. Esch put down £20, and the sum thus clubbed was expended in printing thousands of those terrible missives, which were eagerly circulated, and were speedily seen upon every wall in London. The effect is hardly to be described. It was electric."

### THE GREAT RAILROADS AND THE TIMES.

The country has now reached the crisis of financial difficulties by the suspension of the New York Banks. Some features which have preceded and attended these difficulties, in their relation to railroads, should be noted. It will be remarked that the very first symptoms of financial pressure—going back as far as 1854—commenced with railroads. For this there was very good reason. The entire investment in railroads was at least *six hundred millions of dollars*, of which more than one-half existed in the form of debt. Of this immense investment there was not more than *one-fourth* either subscribed or loaned in Europe. This is contrary to the common opinion, we know; it is, however, true. The Treasury Department has the means of ascertaining very nearly our debt abroad; and after making due allowances for error, not more than *one-fourth* our entire railroad investment is held abroad. This leaves about *three-fourths*, or nearly *five hundred millions* invested by the American people in railroads! Hence when, unthought of and unsuspected, these financial difficulties commenced, in 1854, the railroads of course became conspicuous figures in the scene. They had hundreds of thousands of workmen to be paid; they had unfinished lines and branches, which must be finished to make the other parts valuable. They *must*, therefore, use their credit to the last degree, and at any sacrifice, in order to be but just to their dependents, and to the public interests. Hence the railroads were early in the market to borrow money on *pledges* of stocks, bonds, income, &c. Hence, too, they were among the earliest to make large sacrifices, and pay ruinous interest. In doing this, even in the worst cases, they are hardly to be blamed; for in doing this they really saved the *ultimate* interest of the roads and the country. Take, for example, the *Ohio & Mississippi R. R.* Perhaps this furnishes as strong an example of early sacrifices and desperate efforts; and yet it was these very sacrifices which enabled the company to complete the road. The consequence is it is now a very important work, doing great good to the Ohio valley, and the stock is slowly, but continually rising.

At the time when many of the railroad companies commenced borrowing money on stocks, and making what is called their "floating debt's," and paying what was *then* deemed enormous interest, but is now common among merchants; at that time, we say, *they* (the railroad companies) were almost the only commercial establishments who did such things, and were in such predicament. Hence there immediately followed, on the part of certain presses and classes of men, a denunciation of railroads as the *cause* of a commercial pressure. But this *pressure has continued*, and continued till it ceased among the rail-

roads (with few exceptions) and has become common in the whole commercial and financial public. In this state of things, the question arises whether the railroads, as a body, (that is, the great railroad interest,) have not been treated unjustly? We think the commercial facts now obvious prove that railroad companies shared in the common evil of a *too expanded credit*; but that they were by no means the cause, or the principal element of financial difficulties. The exhibition now made before the public proves that the whole mercantile business of the country was *too extended*; and above all, that in following out what is called *enterprise*, commercial men have *overtraded* in all directions. In this railroad companies have been no more indiscreet or rash than the firmest and most skillful merchants of the country. On an investment of six hundred millions the railroad companies were found, in November, 1854, with probably *fifty millions* of floating debts, current obligations and interest. This, too, was confined to a portion only of the companies. But this was not ten per cent. of their investment. Would a merchant in America have failed if his obligations were not far greater than that? Surely not. Let us turn, for example, to some particular instances. Take the house of *Lawrence, Lane & Co.*, in New York and Boston, a wealthy firm of stable merchants, deeply engaged in connection with the Massachusetts Factories. The *liabilities* of this firm are reported at \$1,800,000! Now if any mercantile firm in this country has a right to have nearly two millions of outstanding liabilities, surely half a million in a floating debt of a railroad company with a long line is small in comparison. It is in vain to say that the merchants have *assets* beyond their liabilities. If this be true of them, it is far more true of railroads. They have an immense property, based on solid, immovable values.

From this statement we think it manifest that the real cause of difficulty has been the same, and no other, to railroad companies and to the commercial public. It is vain to deny the great fact that commerce has been too expanded, and credit used too freely.

In connection with this we want to notice the failure (*financially*) of two of the largest railroad companies in America. We mean the *Illinois Central* and the *New York & Erie*. Both these companies have been the subject of more quackery and deception than any in the country. They have both been footballs of the stock-jobbers, and now come before the public and officially announce their bankruptcy. In regard to the *Illinois Central*, this result was inevitable. About two years since we said in the *Record* that the *Illinois Central* could not be profitable. The story is soon told and easily understood. This road was built *entirely on credit*. Every dollar was borrowed. The original cost was about sev-



enteen millions; but the company has been borrowing money every year since, till now its debt amounts to some *twenty-two millions*. But the managers instantly reply, we had 2,300,000 acres of land, and we are selling these at \$13 an acre, which is \$26,000,000. True, but your *annual* interest is \$1,500,000, and your road does not pay its expenses.—Hence it is obvious that it will take all the lands to pay the interest, and the road itself is worth nothing. It has been kept alive by the common system of quackery.

The other company to which we allude is the *New York & Erie*. We need no longer criticise Mr. Moran. He announces the failure of the company, and his policy will go with it. The stock gamblers have done it.

#### ILLINOIS CENTRAL R. R.

The following Circular from the Treasurer of this Company to the Creditors and Stock and Bondholders of this Road will sufficiently explain itself.

*Circular to the Creditors and Stockholders and Bondholders of the Illinois Central Railroad Company:*

The Directors of the Illinois Central Railroad Company, are under the painful necessity of announcing that notwithstanding the most strenuous exertions to avert such a result, the Company is forced to suspend payment.

The existing derangement in the financial affairs of the country surprised the Company with a large floating debt incurred for the completion and equipment of the road. To provide for its payments when the usual credits became unavailable, an assessment of ten dollars per share was promptly made, and upon this side of the Atlantic, largely paid in advance, enabling the Company to meet its engagements in September. The instalments upon the stock held abroad have been in rapid progress of payment, but the negotiation of the bills of exchange drawn against them, difficult at first, has at length become impossible.

All other and usual modes of raising money are well known to be entirely unavailable. It would be in vain at this time to call in another instalment on the stock, as the same difficulties which prevent the realizing of the proceeds of the one already called, in season to meet the accruing obligations of the Company would attach to any further assessment.

The Directors have therefore yielded to the stern necessity of the case reluctantly, but with a clear conviction that the true interests of both creditors and stockholders would be promoted by the legal steps which, under the advice of able counsel, have been taken to secure their respective rights.

The Coupons due on the Construction Bonds, Oct. 1st, have been paid to a large extent, and a provision has been made to receive the balance outstanding in payment of unpaid instalments, if desired by the holder. No serious inconvenience will probably result therefrom.

All possible exertions will be used to pay off every liability without unnecessary delay, and to relieve the Company from its present embarrassment.

As this has not arisen from any difficulties intrinsic in the enterprise, but from the extraordinary condition of the money market, the Directors see therein no cause to abate the confidence they have heretofore felt and expressed in the value of the Road and the lands of the Company.

By Order of the Board,  
J. N. PERKINS, Treasurer.

#### COLUMBIA R. R., TEXAS.

The Houston Telegraph says:

The contracts for grading the Houston Tap and Brazoria Road were let yesterday. H. K. White & Bro. took the contract from the junction, 20 miles, which is in the neighborhood of Sandy Point. Col. Wm. Sharpe took that part from the end of the twentieth mile to Oyster Creek, including ties, &c.; and Isaac T. Tinsley the remainder, from Oyster Creek to Columbia. That part to Oyster Creek is to be completed by the first of April next; and the balance by the first of May.

The contractors are among the most efficient men in the country. They will go about the work at once, and will push it through with speed. The grade will all be completed within the time specified, and we look to see this road in operation in season to take off the next crop.

#### BANKING IN VIRGINIA.

We find in the *Alexandria Sentinel* the following expose of the responsibilities and penalties of the banks of Virginia:

The old banks received an extension of their charters from the Legislature of 1855-6. The extension is for six years from the 1st of April, 1857. The names of the banks thus extended, are the Bank of Virginia, Farmers Bank of Virginia, Exchange Bank of Virginia, Merchants and Mechanics Bank of Wheeling, Bank of the Valley in Virginia, Northwestern Bank of Virginia, and the Bank of Kanawha. These Banks have established numerous branches throughout the State, and laws are in force, but not yet availed of, authorizing the establishment of a number of others.

The new banks are generally independent, or without branches; the only exception we know of being the recently established branch of the Old Dominion Bank, at Petersburg in Giles county. The principal of them are the Old Dominion Bank at Alexandria with its branch as aforesaid, Bank of Commerce, Fredericksburg; Central Bank, Stanton; Bank of Howardsville, Bank of Rockingham, Harrisonburg; Bank of Danville, Mounticello Bank, Charlottesville. A number of others have been chartered and some of them may have commenced operations.

The Bank of Virginia, Farmers Bank of Virginia, and the Branch of the Exchange Bank at Richmond, are made the depositories of the State's funds. If either refuse to redeem its notes in specie, the public money is required to be deposited with the others. If all refuse, the Governor shall select some other place of deposit until further provision be made by law. [Code chap. 58 § 29.]

The following provisions apply to all the banks, new and old:

If any bank refuse to redeem its notes with specie.

The Governor may, by proclamation, prohibit the notes of said bank from being received as taxes. [Chap. 58 § 28.]

The party presenting the note may on motion or by warrant, recover the amount with interest at 12 per cent. from the date of refusal,—provided the party complaining be not a bank or company itself in suspension. [Chap. 58 § 15.]

In the case of the new banks. (Circulation secured by deposit of stocks in trust with the State Treasurer,) the holder of a note for which specie is refused may cause it to be protested for non-payment; and the State treasurer on receiving notes thereof

shall warn the bank to pay the same, and if it be not done in ten days shall give notice through the papers, that all the notes of said bank whether protested or not, will be redeemed out of the trust property in his hands; to which end he may dispose of said trust property in such way as best to protect the interests of the bill holders.

Stockholders in the new banks are also liable out of their private estate for the circulation and debts of the bank, in proportion to the respective amounts of their stock.

Banks are allowed to have in circulation their notes to an amount equal to five times the quantity of specie money on hand. They are not allowed to issue notes, or pay checks or drafts any part of which is printed,—of less than five dollars.

The act prolonging the charters of the old banks, provided that they should thenceforth issue bills of no other denominations than five dollars, ten dollars, and multiples of ten dollars.

The legislature reserves the right to repeal, alter, or modify the charter of any bank at its pleasure. [Code chap. 58 § 31.]

#### ERIE RAILROAD.

The New York and Erie Railroad after a severe struggle in the attempt to secure money enough to meet its engagements, finally went to protest on last Saturday. The following is the circular of the President to the stock and bond holders.

*To the Stockholders and Bondholders of the New York and Erie Railroad Company.*

The event we have dreaded and foreshadowed to you at the two meetings held on the 23d September, and on the second instant, has at last occurred.

This Company has been forced to allow its engagements falling due yesterday to be protested, notwithstanding the strenuous efforts of its officers, who unaided by you found it impossible to obtain temporary loans, altho' they showed that they could be reimbursed in a few days from the receipts of the Company.

It now becomes imperatively necessary that you should come promptly forward to relieve this Company, so as to prevent your valuable property from passing into other hands, at the risk of being wasted away in litigation between the parties in interest.

A prompt and united effort on your part will yet avert any injurious consequences from the present unfortunate embarrassment. A very moderate amount received in cash will enable this company to resume its payments at once, and the balance of the subscriptions could be made very gradual and easy, without danger to this company.

In view of the present state of things we invite you to meet together on Wednesday evening next, the 14th inst., at 7½ o'clock P. M., at the Mercantile Library, Astor place.

By order of the Board of Directors.  
CHAS. MORAN, President.  
NATHANIEL MARSH, Sec'y.

RENSALAER & SARATOGA R. R.—This road has just declared a dividend of four per cent. from the last six months earnings.

It is stated that T. C. Ham, formerly Master Mechanic on the Little Miami road, and more recently on the Northern Cross road of Illinois, will take a similar position on the Ohio & Miss. road.



## Railroads.

### CAIRO & FULTON R. R.

We are in receipt of the last Report of this company, dated May, 1857. The Report is a long and interesting one, and presents the claims of the Cairo & Fulton R. R. in a favorable light. The road has been surveyed, and the lands granted by Congress located. The condition and prospects of the company will be seen in the following extracts from the Report:

"The stock subscriptions up to July, 1855, when the books were closed, amounted to \$201,200; since the re-opening, in December last, they have been increased \$93,975—making the present total amount \$295,175. It also appears that \$33,557 77, have been received on those subscriptions for first, second and third installments of 5 per cent. and over-payments thereon. There is in arrear, and still due on calls, for second and third installments, \$5,176 25. Of stockholders in default there are 150; of those who have met calls when made, 518—making the whole number 668. It appears further that disbursements up to this time amount to \$28,512 97; that there are assets and cash on hand, \$5,044 80, and that the liabilities of the company are \$8,639 65. This does not include outstanding accounts of agents and others yet to be audited. These will, however, not probably exceed seven or eight thousand dollars; but, whatever the amount, it can only be ascertained, certainly, after their presentation, examination and allowance by the Executive Committee of the Board. For the purpose of meeting indispensable current expenses, and of paying off existing and accruing liabilities, steps have been taken to collect, as speedily as possible, the balance on installments, and also the amount due to the company from other sources. A further call on the stockholders during the ensuing summer or the early part of next fall will be necessary in order to comply with the condition imposed by the 6th section of the late act of the General Assembly, which provides that "said Cairo & Fulton Railroad Company shall, within two years from the passage of this act, either grade twenty-five miles or complete ten miles of said road, at the option of said company."

"First. The road is a requirement of trade—a commercial necessity. This will appear from its connections and its route. Beginning at a point on the Mississippi river opposite the mouth of the Ohio, and constituting an extension of the Central Railroad of Illinois, it not only stands connected with the navigation of those two great rivers at their confluence, but with the northern system of railroads. After passing southwesterly through the exceedingly fertile counties of Mississippi New Madrid, Scott, Stoddard, Dunklin and

Butler, a distance of 76 miles, in southeast Missouri, it strikes the northern boundary of Arkansas, in lat. 36 deg. 30 min. north, long. 90 deg. 19 min. west; thence pursuing the same general direction along the valley of Black river, with the spurs and knobs of the Ozark mountains on one side, and the immense low grounds of the Mississippi on the other, crossing White river near the mouth of Black, the Arkansas at Little Rock, the capital of the State, the Ouachita near Arkadelphia, and Red river at Fulton, and traversing the counties of Green, Randolph, Lawrence, Jackson, White, Prairie, Pulaski, Saline, Hot Spring, Dallas, Clark, Hempstead and Lafayette, it makes its southern terminus on the Texas boundary, in lat. 33 deg. 24 min. north, long. 94 deg. 2 min. west. At this point it connects with the Memphis & El Paso and Houston & Texas Central Railroads, of that State—the one leading off in the direction of the Pacific, and the other centrally towards the Gulf of Mexico, terminating on the Bay of Galveston.

The length of line, as surveyed through Arkansas, is 301 miles; making the entire distance from the mouth of the Ohio to the Texas boundary, near Fulton, on Red river, 377 miles, which exceeds an air-line between those two points less than three miles. Notwithstanding this approximation to a straight line, which, considering its length, is unequalled in any country, deflection to any considerable extent, were it even desirable, would be impossible for a distance of over 150 miles, without encountering the rocky hills and mountains on the west, or the low, swampy regions of the Mississippi, St. Francis and Cache rivers on the east. These natural impediments will forever render rival or competing routes impracticable, except at an enormous cost, and if accomplished, certainly unproductive.

"Secondly. The charter contains no provisions calculated to affect seriously the prosecution of the enterprise or the operation of the road when completed; but it is considered judicious and liberal in all its features.

"Thirdly. The lands granted by Congress to aid in its construction amount to one million one hundred and fifty-five thousand eight hundred and forty acres, all of which lie along the line of the road, are situated in a mild and healthful climate, and, extending across the country from latitude 36 deg. 30 min. to 33 deg. north, are well adapted to agricultural purposes, the larger portion being within the cotton region of the United States. Alternating regularly with the government lands and those owned by private individuals, already rating in many localities at from five to twelve dollars per acre, there can scarcely be a doubt but that they will ultimately attain the same, or even higher rates, under the influence of confidence in the success of the

road. If so, under prudent management, and a judicious and timely disposition, they can surely be made to yield an average per acre of at least seven dollars and fifty cents; this would give an aggregate sum of \$8,668,800. The right of way, two hundred feet in width by three hundred and one miles in length, may be put down at \$150,000. Stock subscriptions have been taken amounting to \$295,175; altogether, therefore, making a total amount of over nine millions of dollars, and constituting means applicable to the prosecution of the road. That the lands could now be made available at a rate equal to the estimate is not pretended. They certainly could not; but that they will in a few years come fully up to it we entertain no doubt. The cost of the road, complete and ready for operation, as estimated by an experienced engineer, of high character for integrity, is \$6,373,802; deducting this from the means on hand, as presented in the foregoing view, and \$2,740,173 will be left, thus affording a wide margin for contingencies.

Fourthly. The affinities of trade between large sections of country in different latitudes bear upon it as the most favorable route for an interchange of their respective productions.

"Fifthly. The immense country west of the Mississippi river, with its inexhaustible mineral wealth, fine soil, and advancing settlement, like that on its eastern side, must and will have railway facilities. The impress of 'progress' is upon it—a great principle is at work, and the same irresistible influence that operated in spreading them like net-work over the country on the other side will accomplish similar results on this. As one division of a base line in any system that may be adopted, none possesses superior, or indeed equal advantages to that of the Cairo & Fulton Road; and, looking to its extension by way of the Iron Mountain and North Missouri Roads, and southwardly through the Texas roads, the spectacle is presented of almost a straight through line of railway west of the Mississippi from one side of the continent to the other, which, for length, grandeur, and usefulness, has no equal in the old or new world.

"Sixthly. In its political and national aspects, as composing one portion of a line of intercommunication between the Atlantic and Pacific divisions of the United States, at all times free from the natural impediments of snow and ice, and costing less by millions in its construction, it cannot fail to attract the attention and enlist the sympathies of the government and of capitalists.

"Seventhly. As an outlet for the productions of Arkansas and the adjoining Indian country, on her western boundary, and as the means of cheapening articles of consumption, it is not only indispensable, but would, by its



two-fold operation in reducing the cost of transportation to and from, in less than five years, reimburse an expenditure equal to its entire cost.

"Of the effect of the road upon the adjoining counties, the subjoined estimate is believed to be no exaggeration :

50 per cent. increase on 1,500,000 acres of land in farms (improved and unimproved) value \$6,424,552.....	\$3,212,276 00
Annual gain:	
By reduction on freight of 20,391 bales of cotton, at \$1 per bale.....	20,391 00
By reaching market with the same at the most favorable period, \$5 per bale.....	101,955 00
By interest saved on two months' detention, riting the same at \$35 per bale, and computing interest at 8 per cent.....	9,615 80
By reduction of freight and cost of articles entering into their consumption, viz: 120,000 sacks of salt at \$1 per sack, \$120,000; iron, steel, nails and pot metal, \$25,000; sugar, coffee and molasses, \$75,000; all other articles, consisting of flour, rice, pork, coarse and fine cotton and linen goods, crockery, glass, cutlery, shoes, leather, saddlery, etc., \$125,000.....	345,000 00
By being enabled to reach and sell in the most favorable markets a surplus of	
1,000,000 bushels of corn at 33½c. per bush.....	333,333 33
100,000 bushels oats at 33½c. per bush.....	33,333 33
50,000 bush. wheat at \$1 per bush.....	50,000 00
50,000 bush. rye at 50c. per bush.....	25,000 00
100,000 bush. sweet potatoes at 50c. per bush.....	50,000 00
50,000 bush. Irish potatoes at \$1 per bush.....	50,000 00
100,000 bush. peas at 75c. per bush.....	75,000 00
20,000 bush. onions at \$1 per bush.....	20,000 00
50,000 bush. turnips at 37c. per bush.....	18,750 00
100,000 bush. green peaches at 50c. per bush.....	50,000 00
25,000 bush. dried peaches at \$1 per bush.....	25,000 00
2,700,000 lbs. of pork at \$3 per 100 lbs.....	81,000 00
2,000,000 lbs. beef at \$2 50 per 100 lbs.....	50,000 00
500,000 lbs. butter at 10c. per lb.....	50,000 00
600,000 lbs. mutton at 2½c. per lb.....	15,000 00
100,000 lbs. beeswax and honey at 10c. per lb.....	10,000 00
Proceeds of garden and poultry.....	20,000 00
Lumber, spirits of turpentine, tar and rosin.....	100,000 00
Hides, peltry and minerals.....	150,000 00
Total.....	\$4,893,054 46

"If this estimate be reliable, it is apparent that, disregarding altogether wild lands owned by the United States and by private individuals, the farmers, planters and others constituting the producing classes of the counties alone embraced in the table, will, the first year after the completion of the road, realize from the enhanced value of farms, reduction on transport and consumption, together with the addition to their list of marketable productions, \$4,893,054 46. It is also apparent, without any allowance for increase of productions, that they would annually thereafter realize \$1,680,778 46; a sum that would of itself, in less than four years, reimburse them for every dollar of its cost, were they to advance it. Their remoteness from market, and the obstructed and uncertain character of the natural and only outlets justify an estimate which would otherwise appear visionary.

"Eightly. It was began and has thus far been prosecuted economically; is comparatively unencumbered with debt; has no outstanding connections with other enterprises or with politics; and, as a corporation, is free to adopt that policy which will be most conducive to the accomplishment of a great end by judicious and well considered means.— That the road will be remunerative to its stockholders when built must be apparent from what has been already said. A prema-

ture commencement, with reckless and extravagant management, might run up the cost to an extent that would render it otherwise. Railways, to be productive, must not only have a route that will draw to them a large amount of business on the score of interest, but be managed in their progress with the same prudence, economy and common sense principles necessary to insure success in any other business matter; and it behooves you, the Board of Directors, and all others who may be concerned, to look well to these subjects."

The officers of the company are :

**DIRECTORS.**—Dan'l Ringo, Pulaski county; H. C. Dye, Independence county; Jas. Russell, Randolph county; S. W. McNeely; R. H. Johnson, Pulaski county; Edward Cross, Hempstead county; Wm. B. Wait, Pulaski county; Jas. L. Witherspoon, Clark county; I. M. Moore, White county; Robert Martin, Dallas county; Green B. Hughes, Saline county; Geo. C. Watkins, H. C. Ashley, Pulaski county.

**OFFICERS.**—Edward Cross, President; Daniel Ringo, Vice President; Richard Fatherly, Secretary; Wm. B. Wait, Treasurer; James S. Williams, Chief Engineer; Mason Brayman, Land Commissioner.

**EXECUTIVE COMMITTEE.**—Daniel Ringo, Chairman; Rich'd H. Johnson, Edward Cross.

#### GRAYVILLE AND MATTOON RAILROAD.

This road is designed to connect the Illinois Southern Railroad, at Grayville, to which point the latter company propose to build their road with present means; and Mattoon on the Illinois Central Railroad. The Grayville *Journal* gives the following report of a meeting on Sept. 19 :

At a meeting of the Directors of the G. & M. R. R., held in Olney, on the 19th of September, D. H. Kennedy, Esq., an engineer of much ability, was elected chief engineer. Mr. Kennedy has, before commencing the survey, visited counties along the route, making a careful reconnaissance of the country over which the line will pass. He has also been soliciting the subscription of stock, and we are very highly gratified, indeed, to learn that he has succeeded beyond his or our most sanguine expectations.

The people, and the whole people in the counties above Olney on the O. & M. R. R., along the line are determined to have the road built at an early day. They are fully able themselves and will do it.

That this line will be extended to Grayville, depends entirely upon the people of Grayville. Albion, and the country along the proposed line from this place to Olney. If the people will do their duty, i. e. take stock to the utmost of their ability, we doubt not but that the road will be extended to this place, and that it will be completed at an early day.

By this the destiny of Grayville will be fixed. By the construction of the Illinois Southern Railroad, which we now look upon as a certainty, we will have an outlet to, and connection with the great south, southeast and southwest, and also the north and east.

By the extension or continuation of the line from Olney to this point, we will have direct communication with Chicago and the great lakes in the north; also with St. Louis, and divers other places; but we cannot notice further in this random article the important connections and advantages with and to Grayville. Suffice it to say, for the present, that, by the construction of this road in connection with the Illinois Southern Railroad, the fact of Grayville soon becoming a city of importance, is fixed beyond a shadow of a doubt.

We would add by way of conclusion, that the charter of the Grayville & Mattoon Railroad Company is a most liberal one. The company receives subscriptions payable in land when it is preferred to cash.

A subsequent meeting held at Albion on Sept. 29th, resulted in subscriptions of both land and money for this project.

It is a matter of importance for Cincinnati and the Ohio and Mississippi Railroad, that the link of the Illinois Southern Railroad between Grayville and Vincennes should be completed at an early day, we trust the friends of the road will take early steps to secure this link.

[From the London Mechanics' Magazine.]

#### IMPROVEMENTS IN THE MANUFACTURE OF IRON AND STEEL.

Considerable curiosity has been expressed in reference to the inventions of M. L'Abbe Pauvert, of Châtellerault, France, in consequence of an exciting notice which appeared some time since in the letter of the Paris correspondent of the *Times*. We take the earliest opportunity, therefore, of making known the nature of these improvements in the manufacture of iron and steel. The inventor has obtained patents for three inventions in this country. The first—for "certain improvements in manufacturing iron"—is thus described by him :

"The object of this invention is to deprive or drive off from puddled iron sulphur, phosphorus, and other metalloids, by cementation. It is applicable to puddled iron in any of its stages or states. I employ a cement composed of the following substances: 14 parts (by weight) oxide of iron; 30 highly aluminous clay; 50 carbonate of lime, or wood ashes; 4 finely divided charcoal; 1 carbonate of potassa; 1 carbonate of soda. These proportions need not be rigorously adhered to, but may be varied, and one or more of the substances composing the cement may be dispensed with, according to circumstances and the nature of the iron. I place the iron with the cement in layers into a cementing furnace, and I heat the furnace in the ordinary manner. This iron, after cementation, is welded, and then drawn into bars. It thus becomes as soft and as tenacious as iron made with charcoal. The many electric currents produced by the mutual reaction of the elements, the reduction of the earthy and alkaline metals, and of a portion of the oxide of aluminum, favor the escape and absorption of phosphorus, sulphur, and other metalloids. In order that all the carbon may be decomposed and disappear in the state of oxide or carbonic acid, it is necessary that the carbonates and oxides should be in excess."

The second invention—for "certain improvements in manufacturing cast steel"—he thus describes :



"The object of this invention is to decarbone cast iron by prepared oxide of iron, and to free it from gaseous and solid metalloids. I crush cast iron heated to a red heat under rolls, or under a tilt hammer, or broad-faced forge hammer. The portion of the cast iron reduced to a fine powder serves for the preparation of the oxide, while that which is in coarser particles serves for reguluses or metal. To render the oxidation complete, the powdered cast iron is wetted with pure, acidulated or alkalized water. To obtain cast steel I have recourse to the processes and apparatuses now used for fusing. I place in a melting pot from 33 to 40 parts (by weight) of oxide, prepared as just stated, to 100 parts of crushed cast iron to every 100 parts cast iron; 8 or 10 parts of the following composition are added (which must be kept as free as may be from exposure to the air): 4 parts (by weight) dry carbonate of soda; 4 dry carbonate of potash; 3 wood ashes; 2 borax; 3 oxide of manganese; 4 to 7 hydrogenated carbon, soot or lampblack. These ingredients should be carefully mixed, but the number and proportions may be varied according to the product desired. Instead of oxydized cast iron, iron filings or iron raspings may be used, the same being oxydized by the same process. Instead of 4 parts dry carbonate of potash, 2 parts caustic potash may be employed. The numerous reactions of these ingredients produce the following effects:—1. The generation of numerous electric currents. 2. Complete reduction of the manganese and oxide of iron (produced by the oxydized cast iron or iron filings) which unite with the steel. 3. Reduction of the earthy and alkaline metals and borax which absorb the metalloids. 4. Disappearance of the nitrous gases, because potassium, sodium, and calcium, reduced in presence of steel and of carbon in an incipient state, absorb nitrogen, and form cyanides of potassium, sodium and calcium. 5. Formation of larger crystals in the steel, when it cools down, than have hitherto been produced in steel."

The third invention—for "certain improvements in manufacturing steel and cast steel"—he describes as follows:

"The object of this invention is—1. To purify iron, and to combine it chemically with carbon by cementation. 2. To convert it into cast steel of superior quality, whatever the nature of the iron first employed, I make use of a cement composed of the materials and in about the proportions following:—33 parts (by weight) of finely divided charcoal; 33 parts of highly aluminous clay; 33 parts carbonate of lime or wood ashes; 1 part carbonate of soda; 1 part carbonate of potash. I stratify the iron with this cement in an ordinary cementing furnace, and heat it in the same manner as is now generally followed. I thus obtain a steel possessing all the qualities of that known as German or "Rives," or shear steel (*acier d'Allemagne ou de Rives*). The successive heats and firings do not cause it to part with the carbon which is intimately combined with it, as in cast or in shear steel. And for this reason, carbon having but a small affinity for iron, requires, in order to enter into intimate combination with it—1st, to be added in an incipient state; 2d, to be assisted in its combination by numerous electric currents. Now these conditions are fulfilled by my process, for—1st. The mutual reaction of the carbon and the carbonates causes the greater part of the carbon to assume a molecular state; 2d. This change of the carbon and of the carbonates, the action

of the red-hot iron upon the oxides of aluminium, of calcium, of potassium, of sodium, with the carbon in the molecular state, produce or generate numerous currents of electricity. Further, the earthy and alkaline metals appearing in an incipient state, greedily absorb sulphur, phosphorus, and the other metalloids. Thus prepared, this steel may be used as shear steel or German steel (*acier d'Allemagne*), the properties of which it possesses. In order to convert this steel into cast steel, the ordinary processes of fusing in pots is followed, but with the addition to the metal in the pots of from five to 6 per cent., by weight, of the following mixture, which, as far as possible, must be kept from contact with the atmosphere:—4 parts (by weight) dry carbonate of soda; 4 parts dry carbonate of potash; 3 parts wood ashes; 2 parts borax; 3 parts oxide of manganese; 4 to 7 parts hydrogenated charcoal, soot, lampblack, &c.—The four parts of carbonate of potash may have substituted for them two parts of caustic potash. The mixture of these substances should be effected with care, and their number and proportions may be varied to suit the nature of the products to be obtained."

The reactions of these substances are said to be the same as in the former case.

[From the Cincinnati Daily Commercial.]  
**IMPORTANT OPINION OF THE CITY SOLICITOR—INVALID ACTION OF COUNCIL RELATIVE TO RAILROAD BONDS.**

Some time ago, Charles Remelin, Esq., President of the Dayton Short Line Railroad Co., submitted a proposition to the City Council, granting certain privileges of that company to the city, on condition of a proposed issue of bonds in favor of the company. The communication was referred to a committee, and that committee sought the advice of the City Solicitor as to the legality of the proposed proceeding. Judge Hart submitted his reply Wednesday, and that evening it was presented to Council. It is an important document, and we give it below entire. It will be seen that the Judge gave not only his opinion on that question, but takes up the recent issue of railroad bonds by the city, and holds that the substitution of stock securities for first mortgage bonds was illegal, and is void.

A number of the members of the Board expressed themselves Wednesday evening as concurring with the opinion of the City Solicitor, and so important is the question that the paper was ordered to be published in all the daily journals of the city.

OFFICE OF THE CITY SOLICITOR,  
 October 7th, 1857.

To Charles Rule, Esq., and others, Special Committee on the Communication of Charles Remelin, President of the Dayton Short Line Railroad Company:

GENTLEMEN:—My written opinion has been asked upon the question of law involved in this reference, and in compliance with your request I now respectfully submit the conclusions to which I have arrived.

The railroad company offers to convey to the city, forever, the free use of the tunnel, for the purpose of laying down water pipes therein. Also, upon the same terms, the free transit through said tunnel, and over the road of said company as far north as Sharon (12 miles), of all coal brought into the city for its own use, and that of its public institutions, including water works, public schools, house of refuge, work house, &c., and also a fair share of depot room for the coal thus brought.

The consideration asked by the company for these privileges, is the sum of two hundred thousand dollars, in monthly installments of \$20,000 each, either in cash or in the bonds of the city, at the city's option.

Upon the proposition of the company, thus stated, there are several legal questions which, with a single exception, I do not deem it necessary at this time to discuss.

Assuming that the proposed arrangement between the company and the city is not obnoxious to the 6th section, 8th article of our constitution, and assuming, moreover, that the Trustees of the railroad company have the legal authority to transfer, and that the City Council has the legal authority to purchase the privileges referred to in the company's communication, I am, nevertheless, clear in the opinion that the Council does not possess the power, by an issue of city bonds, to pledge the future revenues of the city, in any case or for any purpose whatever, unless there be an act of the Legislature specifically conferring the power. This power to issue bonds binding future Councils and pledging the future income of the city, is not within the ordinary powers of Council, but demands, for its exercise, special legislative interposition. And, in my judgment, it is equally true that Council cannot, in the exercise of its ordinary powers, divert a fund in the treasury to purposes for which it was not assessed—purposes not contemplated in a levy of taxes for the current fiscal year. A power to divert (for instance) the School or Watch Fund, or the fund levied upon the Tax Duplicate for the ordinary expenses of the municipal government, to outside objects, would, in like manner, as in the case of the issue of city bonds, require an express sanction of the Legislature.

If I am correct in these conclusions, and I have been unable to find anything in our charter, or in the general principles of law, which apply to and govern the action of corporate bodies, which ought to lead me to doubt their soundness, it becomes altogether unnecessary to consider other propositions of law involved in such an arrangement as the one proposed by this railroad company.

The advantages, direct and collateral, which might result to the public by accepting the proposition of the company, ought not to induce the Council to exercise a power, to say the least of it, of very doubtful legality.

In this connection, but not directly pertinent to the reference upon which you are required to act, allow me to suggest that, in disposing of the question upon which my opinion was required by you, it became necessary to examine carefully the several acts of the Legislature and the several ordinances and resolutions of the City Council having reference to the loans, to the extent of one million of dollars, heretofore made by the City Council to several railroad companies, and I desire, through your committee, to submit to Council, briefly, the result of my examination. In the case of the Hsmilton & Eaton Road, the city's first mortgage remains intact; but, in respect to the other roads, the Council and all parties in interest have heretofore acted upon the assumption that the remaining \$850,000 is in no otherwise secured than by an hypothecation of stock of the several companies, worth, at its market value, say \$150,000, the safety of the remaining \$700,000 depending upon the solvency of the several companies, or their willingness to save the city harmless. The conclusion which has forced itself upon my mind, and which I announce to Council



as my opinion, founded upon a careful examination, is, that the acts of Council indispensable with a mortgage upon the Ohio & Mississippi Road, and the cancellation of the mortgages upon the other road to which loans were made, were acts simply null and void, and the first lien of the city upon all of these roads, which was expressly created by the law under which the loans were made (see 43 O. local laws, 308), remains in full force and operative as between the city and the companies, and as between the city and all other parties who subsequently dealt with these companies.

It is true the Council was invested, by the act of the Legislature, with a discretion to take a first mortgage or other securities for the safety of the city; but in any case, and under all circumstances, the lien of the city, prior to all other, was declared by the Legislature should exist—and I submit that the act of the Legislature became, in point of fact, and by legal operation, the city's mortgage, and unless the acts and resolutions of the City Council are paramount to a law of the State, the Council's waiver of the city's lien upon the Ohio & Mississippi Road—the cancellation of the mortgages which were subsequently ordered, were acts of the Council in conflict with the law of these loans, and of no binding force upon the city.

The members of council, by referring to the law under which these loans were made, and which I have pointed out, will perceive that it was not to take effect—the loans were not to be made until a majority of the legal voters of the city had given it their sanction—thus rendering both subsequent action of the Council and of the people necessary, before the loans could be made. As I have already remarked, the Council had a discretion under the law to enact an actual, formal, visible parchment mortgage upon the roads—or such other security as might be agreed upon—in every event, the city's first lien being preserved—but, to my apprehension, this discretion was exercised, and exhausted, when, on the 20th day of September (see minutes, vol. 22, page 148), Council submitted to the people by a solemn resolution, the question whether those loans should be made, the company in every instance executing to the city a first mortgage upon their roads.

The vote of the people was taken on the 8th of October, 1850, and it was not until about one year thereafter, the City Council passed the ordinances which authorized the substitution of stock, in the case of the Ohio & Mississippi Road, and the cancellation of mortgages which had actually been taken and recorded, in the cases of the other roads.

By this brief statement it will be observed that a state of case is presented in which the act of the Legislature declared that the city shall, for all loans made, have a prior lien upon the roads for bonds advanced, and, on the other hand, the Council, which derived its whole power from this same act, and was unable to move except under its sanction and according to its provisions, solemnly declares that the city shall not have this prior lien, but that it shall be waived in favor of parties who subsequently deal with the roads—and, not only are the liens of the law changed, but the vote of the people is nullified by the act of the Council in the substitution of worthless stock in lieu of the mortgages.

I will not now trouble Council with the reasons at length which have forced me to these conclusions upon this subject, adverse to the opinions of former Solicitors, and which invalidate decrees of the Council should my

conclusions prove correct, but I have felt it my duty to call the attention of Council to the subject.

The interests involved are of great magnitude, and should the opinion I have announced be ever sanctioned, as I believe it will be, by a judicial decision, more than a half million of dollars may be saved to the city, or, in other words, the difference between a first mortgage upon the roads and a hypothecation of stock, comparatively of no value.

Respectfully submitted,  
SAMUEL M. HART, City Solicitor.

#### MASSACHUSETTS RAILROAD DIVIDENDS.

The following table, prepared by that careful statistic, George A. Foxcraft (originally for the Boston Courier), exhibits the percentage of dividends paid by seventeen railroads of Massachusetts during the last five years, and the total cost of said roads at the beginning of each year. January 1, 1852, the roads named cost \$43,731,400; January 1, 1857, \$47,852,000; increase, \$4,120,600. The net earnings of these roads in 1851 were \$2,929,800; in 1856, \$3,532,600; increase, \$602,800:

Railroads.	When opened.	Capital.	Div. 1852.	Div. 1853.	Div. 1854.	Div. 1855.	Div. 1856.	Average last five years.
Boston & Providence.	1833	\$3,160,000	15%	15%	15%	15%	15%	15%
Boston & Worcester.	1835	4,500,000	7%	7%	7%	7%	7%	7%
Boston & Lowell.	1835	1,830,000	7%	7%	7%	7%	7%	7%
Nashua & Lowell.	1835	500,000	8%	8%	8%	8%	8%	8%
Norwich & Worcester.	1839	2,835,000	4%	4%	4%	4%	4%	4%
New Bedford & Taunton.	1840	500,000	8%	8%	8%	8%	8%	8%
Western.	1841	6,150,000	7%	7%	7%	7%	7%	7%
Boston & Maine.	1843	4,155,700	7%	7%	7%	7%	7%	7%
Fitchburg.	1845	3,340,000	6%	6%	6%	6%	6%	6%
Old Colony & Fall River.	1847	1,750,000	5%	5%	5%	5%	5%	5%
Connecticut River.	1847	1,750,000	5%	5%	5%	5%	5%	5%
Providence & Worcester.	1847	1,550,000	3%	3%	3%	3%	3%	3%
Cape Cod.	1848	600,000	4%	4%	4%	4%	4%	4%
Worcester & Nashua.	1848	2,100,000	3%	3%	3%	3%	3%	3%
Lowell & Lawrence.	1848	300,000	4%	4%	4%	4%	4%	4%
<b>Total.</b>		<b>\$43,731,400</b>						
		<b>1851.</b>						
		<b>43,727,700</b>						
		<b>1856.</b>						
		<b>44,733,600</b>						
		<b>Cost.</b>						
		<b>1851.</b>						
		<b>\$46,761,400</b>						
		<b>1856.</b>						
		<b>\$47,650,600</b>						

The Old Colony and Fall River Railroads were united in one corporation in 1854. The Norwich & Worcester dividends are on preferred stock; those declared in 1855-6 were payable in bonds. The dividend of the Cape Cod in 1855 was payable in stock. The Worcester & Nashua is preferred stock.

**NEW RAILROAD PROJECT.**—The Iowa & Minnesota Northwestern is the name given to a road projected from Muscatine to some point on the Minnesota line, where it is designed to connect with the Minneapolis & Cedar Valley Railroad. It is proposed to run via Tipton, Mt. Vernon, Marion, Center Point, Marysville, Waterloo, Janesville, Waverly and Bradford. It will be seen by a glance at the map that a large and important part of

Linn county is traversed by the proposed route, and hence we should be glad to see it succeed. But we have no doubt that other roads which are now comparatively well under way, and which will follow nearly the same route and supply the same section of country with abundant railroad facilities, will be completed before this can be got fairly under way.

**WINTER TIME TABLE.**—The recent Railroad Convention at Buffalo adopted the following Time Table for the winter season:

GOING WEST.	
New York, depart.	6 00 A. M., New York time.
Buffalo, arrive.	12 00 midnight, N. Y. time.
Buffalo, depart.	12 10 A. M., Buffalo time.
Suspension Bridge, arrive.	11 50 P. M., Hamilton time.
Chicago, arrive.	11 30 P. M., Chicago time.
New York, depart.	11 30 A. M., New York time.
Buffalo, arrive.	9 00 A. M., do do
Buffalo, depart.	9 10 A. M., Buffalo time.
Suspension Bridge, arrive.	8 45 A. M., Hamilton time.
Chicago, arrive.	8 30 A. M., Chicago time.
New York, depart.	5 00 P. M., New York time.
Buffalo, arrive.	1 00 P. M., do do
Buffalo, depart.	1 15 P. M., Buffalo time.
Suspension Bridge, arrive.	12 45 P. M., Hamilton time.
Chicago, arrive.	3 00 P. M., Chicago time.
GOING EAST.	
Chicago, depart.	6 30 A. M., Chicago time.
Suspension Bridge, depart.	6 30 A. M., New York time.
Buffalo, arrive.	6 00 A. M., Buffalo time.
Buffalo, depart.	6 30 A. M., New York time.
New York, arrive.	12 00 midnight, do do
Chicago, depart.	3 00 P. M., Chicago time.
Suspension Bridge, depart.	6 00 P. M., New York time.
Buffalo, arrive.	5 30 P. M., Buffalo time.
Buffalo, depart.	6 10 P. M., New York time.
New York, arrive.	1 00 P. M., do do
Chicago, depart.	9 00 P. M., Chicago time.
Suspension Bridge, depart.	11 30 P. M., New York time.
Buffalo, depart.	11 30 P. M., Buffalo time.
Buffalo, arrive.	12 20 A. M., New York time.
New York, arrive.	6 40 P. M., do do

#### CHICAGO & ROCK ISLAND R. R.

This company has resolved not to pay a dividend in October. The following is the explanation as given by the Treasurer:

TREASURER'S OFFICE OF THE CHICAGO & R. I. R. R.)  
No. 13 William Street,  
NEW YORK, Thursday, October 1, 1857.

To the Stockholders of the C. & R. I. R. R.:

The 10th of Oct. is the usual day for the semi-annual dividend. The Directors have resolved that the usual dividend for October will not be paid. The stockholders have a right to know the reason for this decision, when the earnings of the road for the year ending on the 30th of June are shown to be \$8,292 per mile, equal to \$1,886,000 for the year. Within the last twelve months there has been expended a larger amount for locomotives, cars, and other equipments, land, buildings and iron for new side tracks, and there is to be paid for iron on the 13th November, the additional sum of \$64,000. Had the present pecuniary difficulties of the country, which have retarded the movement of the crops, and otherwise impaired the business of the road, been anticipated, enough might have been retained from these expenditures, which were made in the confident expectation of an increase of business which is not realized, to have paid the October dividend. By passing the October dividend, the company will be enabled, on the 13th of November, to pay the last dollar of its floating debt, and will have the means of paying the interest on its bonds in January, the Peoria rent in February, and resume its dividends in April on its capital. The repairs and replacing of works and structures injured and destroyed by the unexampled freshets in February last, have been of a more permanent and expensive character than the original ones, and are estimated by the Superintendent to have occasioned an extraordinary expenditure of \$150,000. The road is now



in excellent condition, and the equipments are ample for a large increase of business; and, with entire freedom from a floating debt in November, the passing of October dividend, under the peculiar circumstances alluded to, ought not to weaken the confidence of the shareholders in the value of their property. This brief statement of the present condition of the affairs of the company is given for the purpose of cautioning the shareholders against parting with their stock at the present depressed prices.

A. C. FLAGG, Treasurer.

#### THE COLUMBUS RAILROAD CONVENTION.—

This body, which met at Columbus last week, adopted resolutions to dispense with runners or agents to solicit passengers; in favor of an increased charge for freights; a limitation of free passes; a reduction of speed, and other resolutions, generally coinciding with late arrangements of the Eastern roads. The freight rates adopted, to take effect from the 1st of October, are as follows:

##### Eastern-Bound Freights.

	Fourth Class.	Flour.
From Cincinnati to New York.....	65	\$1 25
From Indianapolis to New York.....	70	1 35
From Columbus to New York.....	58	1 10
From Dayton to New York.....	65	1 25

##### Western-Bound Freights—From Cleveland.

	1st.	2d.	3d.	4th.	5th.
To Cincinnati.....	40	30	25	20	18
To Indianapolis.....	45	35	30	22	20
To Dayton.....	40	30	25	20	18
To Springfield.....	30	25	20	18	16
To Columbus.....	30	25	20	18	16
To Louisville.....	60	50	40	35	33
To Bellefontaine.....	30	25	20	18	16

The last table of rates to take effect in the cities of New York, Boston, Philadelphia and Baltimore on the 10th of October, and at Buffalo, Suspension Bridge, Dunkirk, Pittsburg and Wheeling on the 15th of October.

#### BRITISH RAILWAY TRAFFIC.

A Parliamentary return, just issued, shows that 71,091,075 passengers were conveyed on railways in the United Kingdom, during the half year ending the 31st of December, 1856. Of these 9,225,622 were first class, 21,499,919 second class, 12,285,115 third class, and 28,080,347 Parliamentary. The total number of passengers conveyed in the corresponding period of 1855 was 66,765,431, of which 23,148,372 were Parliamentary, showing, as in former years, a great increase in this class. The holders of season tickets increased from 14,553, in the half year ending December, 1855, to 17,487 in the half year ending December, 1856. The receipts for first class passengers amounted to £1,659,912; for the second class to £1,897,991; for the third class to £491,633; for the Parliamentary class to £1,497,246; and for holders of season or periodical tickets to £101,472, making, together with £3,583 excess fares, £5,651,839 for passengers. The total receipts for passengers' luggage, parcels, carriages, horses and dogs, amounted to £438,579; for mails to £205,488; for merchandise to £3,897,574; coal to £1,029,301; other minerals to £272,567; cattle to £92,292; sheep to £66,911; pigs to £17,727; making the receipts for general merchandise, minerals and live stock, £6,087,873, and the grand total £12,383,741, from all sources of traffic on 8,708 miles of railway, against £11,613,550 on 8,296 miles of railway at the corresponding period of 1855, showing an increase of £770,191, including £487,930, the increase on general merchandise, mineral and

live stock traffic. The total receipts on 6,447 miles in England and Wales amounted to £10,530,035 for the half year ending 31st of December, 1856, against £9,912,975 on 6,217 miles in the corresponding period of 1855, showing an increase of £617,060, including £414,567 for goods, minerals and live stock. The total receipts on 1,203 miles in Scotland amounted to £1,251,121, against £1,146,540 on 1,091 miles in same period of 1855, showing an increase of £104,581, including £55,404, the increase on merchandise and mineral and live stock traffic. The total receipts on 1,057 miles of railway in Ireland amounted to £602,584, against £554,034 on 988 miles in same period of 1855, showing an increase of £48,550, including £17,958, the increase on merchandise, minerals and live stock. Of the 71,091,075 passengers conveyed on railways in the United Kingdom, 59,168,188 were conveyed on railways in England and Wales, 7,484,239 on railways in Scotland, and 4,438,647 on railways in Ireland. The number of passenger trains in the United Kingdom during the half year was 946,664, and of miles traveled by them 21,522,329; the number of goods trains was 527,568, and miles traveled by them 15,846,942. The number of passenger trains in Scotland was 107,159, and the number of miles traveled by them 2,006,240; and goods trains 74,630, and of miles traveled 2,186,745. The number of passenger trains in Ireland was 68,664, and of miles traveled by them 1,667,098; and the number of goods trains 11,351, and of miles traveled by them 548,451.—*Hunt's Merchants' Magazine.*

#### ROME—GADSDEN R. R. GEORGIA.

At a meeting held on September 21, to devise means for furthering the construction of this road Col. Cochran made the following remarks which we find reported in the *Rome Advertiser*:

As chairman of the committee of delegates, I cannot, in submitting their report for your approval, omit the opportunity of making a few observations upon the History of railroads generally. The South Carolina Railroad was the first undertaking of the kind. It was built from Charleston to Hamburg. It was, so to speak, commenced in the dark and finished in the dark, for very little was understood about such projects in those days. I was one of the original stockholders. We progressed slowly for a time. Even the Chief engineer had a very imperfect conception of what a road ought to be. Well, after a while, we applied for State aid. The Chief Engineer was sent to the Legislature to represent the interests of the new enterprise, and made there a speech in favor of the State lending its assistance, in the course of which he took occasion to say, and used it as an argument, that as many as ten passengers on an average, might be calculated on every day each way; and that these passengers would be enabled to breakfast in Charleston, and dine next day in Augusta. Under the encouragement of even this meagre statement, South Carolina gave five hundred thousand dollars of State aid. The Road was, at that period, built no further than Aiken, where a large city had been laid out, and was expected to be built. It was next found practicable to build to the foot of the hill from Hamburg. Before completing that much, the idea of an inclined plane favorably presented itself and was adopted. For some years a stationary

engine and a stout cable were used to convey the trains up and down the inclined plane.

We then had no thought that negro labor could be successfully employed to build a railroad. Large numbers of Irishmen were imported for the purpose. I have seen as many as five hundred in one company. At length we got the road built to Augusta. The first engine that was built to run on that road was constructed with wooden hubs and spokes. Such were some of the imperfect conceptions and rude notions of the time respecting the South Carolina Railroad, and railroads generally.

Many misapprehensions still exist in regard to railroads. When the Georgia Railroad was projected, it was said that the city would suffer much injury from the loss of the wagon trade. Those croakers have been disappointed, for Augusta is four to five times larger than it was then, and proportionably more prosperous. The same objection about the wagon trade was used at Atlanta—the Lagrange road, it was said, would ruin the city, yet it has continued to increase steadily in wealth and population. The same line of argument has been pursued respecting Rome, and will be answered in the same way as successfully.

#### RAILROAD CLEARING HOUSE.

Mr. George Dartnell of the Grand Trunk R. R. laid before the late convention of railroad managers a plan for a general Clearing House such as that adopted by the English railways. The details of the plan are:

1st—The business of the Clearing House should be managed by a committee or Board of Directors, composed of a President or Superintendent, or other duly authorised officer of each company, a party to the system.

2nd—The account should be divided into separate heads—say: PASSENGERS—FREIGHT—MILEAGE and DEMURRAGE.

*Passenger Department.*—All through tickets going on to foreign Roads should be supplied by and reported to the Clearing House, the companies adopting the system agreeing not to accept any other. Through rates to connecting points, should be fixed by the Clearing House committee, and each company's proportion, adjusted either upon a mileage or special division, as may be agreed upon by the companies interested in any particular route.

*Freight Department.*—In billing through freight, a duplicate invoice should be sent to each transshipping station, the original accompanying the goods to their destination. Through rates should be fixed and adjusted in the same manner as specified in the passenger department; charges to be collected reported to the Clearing House which will supply printed forms necessary to the transaction of the business.

*Mileage and Demurrage.*—The Clearing House should employ number-men at the different junctions, who would provide necessary particulars for making up mileage and demurrage accounts of cars running over foreign roads.

#### RAILROAD SURVEYS IN THE UPPER PENINSULA.

The several corps of railway engineers are getting near the end of the field work of their surveys.

The Bay de Noquet corps in fact, are entirely through, have come in, and are making up their maps and profiles.



The Chief engineer of the Marquette & Ontonagon is bringing his line from Teal Lake into town by way of the Dead River country.

The Chief of the Chicago, St Paul & Fond du Lac, has just come in from the State line and reports his field explorations almost closed.

The general result of all these examinations is decidedly better than the most hopeful had expected. The main difficulty with all the routes, as heretofore stated, lies in climbing the north slope of the watershed. The ascent is considerable, and the distance short; so that much care is required in getting tolerable grades. But all have succeeded in this matter, better than was looked for.

Having once gained this height, they all find good alinement, easy grades and light work.

And as to the lands covered by the grant, they are all still better satisfied with the country on and near their respective lines. They find good soil, fine timber, abundance of springs and quick clear brooks, and many natural meadows stocked with choice grass. In short, a region exceedingly well fitted for grazing and stock growing, and for all the grains except corn.

Moreover the Ch., St. P. & F. du L. R. R. and the M. & O. R. R. lines touch large deposits of the best iron ore, and many fine mill seats.

Hereafter we hope to give details.

#### MONETARY AND COMMERCIAL

The past week has been marked by more numerous and startling financial events than have perhaps ever transpired before in one week of the past unprecedented two months. Things are fast culminating, and the bottom must be reached soon. The Illinois Central R. R. has made an assignment in New York. This is understood to be a movement designed to prevent attachments upon it there as a foreign corporation. The Erie R. R. has gone to protest. The banks in New York, Boston, Albany and Hartford have all suspended specie payment, and the presumption is that there will be a general suspension. In New Orleans the Union Bank has suspended, and there is a heavy run on all the free banks.

Business is at a stand. There are very few commercial failures in our city. The dry goods houses have been the principal sufferers.

The regular houses are affording no discounts whatever. Outside transactions range every rate, from 10 per cent. per annum to 3 per cent. per month and higher. Gold is at a nominal premium of from 5 to 10 per cent., and cannot be had in large quantities. Exchange on New York has been difficult to obtain at 5 to 10 per cent.

The prices of stocks in New York show the terrible state of money affairs. New York State 6s sell at 90; Ohio State 6s at 84; Kentucky 6s at 84; Missouri's 62; Others in proportion.

Hewson & Holmes, in their circular, say:

Since the date of our last circular there has been an almost total cessation of business in all departments of trade. The entire time and attention of our merchants and dealers has been absorbed in the discussion of passing events, and the preparation and arrangement, so far as the same was practicable, for maturing obligations. Thus far our merchants and business men including our manufacturers, standing shoulder to shoulder, have breasted the storm most nobly; nowhere in the country are the trading community sounder or in a more healthy condition than in Cincinnati.

To-day the announcement of the suspen-

sion of all the Eastern Banks has produced feelings of relief. All now look to the future with cheerfulness and hope, believing that the worst has passed, and that from this time on we shall begin the march of improvement. The Western Banks will no doubt follow the lead of the Eastern, and forthwith suspend. All classes have learned a lesson in the recent fearful visitation which they will not soon forget; the shadow of desolation will rest over the houses of many who hitherto deemed themselves above want; but the great mass of all who were but yesterday involved in the fearful vortex, will by industry and economy soon outlive the tornado, which will stand for long years to come as a beacon, we hope, to warn the too enterprising merchant that a smooth sea often covers the most dangerous rocks.

It is hardly necessary to add that the sales of securities have been of small moment, and are confined to Ohio Township Bonds at 37 to 38; Covington & Lexington 2d mortgages at 60; and Little Miami 6 per cents at 75. In the future we look for an early and steady improvement, such as will bring buyers and sellers together upon more equitable terms.

The produce of the country will now begin to move actively to the seaboard, which will give railroads an active and remunerating business. We are favored with the report of the earnings of the Hamilton & Dayton and Mad River & Lake Erie Roads for the past month. These returns indicate (more particularly of the former road) an exceedingly prosperous business.

Earnings of Ham. & Dayton R. R. for Sept., 1857.....	\$57,175 26
Sept., 1856.....	49,949 30
Increase.....	\$8,225 96
Earnings of Mad River & Lake Erie R. R. for Sept., 1857.....	\$75,650 33
Sept., 1856.....	72,588 70

Decrease.....\$3,061 63  
We are unable to report what will be the currency on which business will in future be done in this city, but as all the banks of the country will soon stand on the same level, we have no doubt but that our bankers will adopt a most liberal policy, and receive the notes of all the banks in good standing in the surrounding States, as also the notes of the Eastern Banks in good credit. This will bring into active use a large amount of circulating notes which for the past few weeks have been utterly valueless for all the purposes of trade. The rates for Eastern exchange are so unsettled that we are unable to give quotations. Gold is held at 10 per cent. premium over current bank notes.

SALES AT THE NEW YORK STOCK BOARD—OCT. 12.	
\$8,000 N. Y. State 6s, '65.....	90
9,000 N. Y. State 5s, '58.....	91
9,000 Ohio State 6s, '60.....	84
13,000 Ohio State 6s, '86.....	82
3,000 Kentucky 6s.....	84
1,000 Tenn. State 6s, '90.....	65
17,000 Virginia 6s.....	63
2,000 Missouri State 6s.....	64
2,000 California State 7s, 1870.....	56
3,000 N. Y. Central 6s.....	66
10,000 Erie R. R. 2d Mortgage Bonds.....	70
1,000 Hudson Riv. R. R. 1st Mort. Bonds.....	75
6,000 Illinois Central R. R. Bonds.....	53
85 shares New York Central.....	52
117 " LaCrosse & Milwaukee.....	5 1/4
50 " Del. & H. C. Company.....	80
92 " Penn. Coal Co.....	49
310 " Cumberland Coal Co.....	5 1/4
265 " Erie.....	6
100 " Harlem R. R. stock.....	6
200 " Reading.....	29
103 " Panama.....	63
50 " Illinois Central.....	70
28 " Cleve. & Pittsburg.....	8
10 " Cleve. & Col. & Cin.....	7 1/2
100 " Galena & Chicago.....	53 1/2
200 " Cleveland & Toledo.....	22 1/4
185 " Chicago & Rock Island.....	55
5 " New Jersey R. R.....	100

## ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

### WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan 8 ly 119 Walnut st., Odd Fellows' Building,

### To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great W. & A. River, in White county and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.

### Travelers! Tourists!! Railroad Men!!!

#### DINSMORE'S

COMPLETE AMERICAN

### Railroad and Steam Navigation

## GUIDE AND ROUTE BOOK.

Edited by RICHARD S. FISHER, Statistical Editor of Colton's Atlas of the World, &c.

288 PAGES, PRICE 25 CENTS.

#### CONTENTS:

EDITOR'S NOTE BOOK.—A monthly Record of Material Progress.  
INDEX to the 28,000 miles of Railroads now in operation.  
INDEX to 1,500 ROUTES.—Giving page of Railroads or Steamers comprising such; making a list of 10,000 Cities and Villages.  
OFFICIAL TIME TABLE.—Giving starting time from all the Stations—Distances—Fares—&c., with copious notes of reference—showing the connections with other Roads and Stages with towns in the Interior, also Steamboat connections.  
COMBINED RAILROAD ROUTES.—A new feature never before published—gives principal Stations—Roads over which you go—with distances and page in book.  
STEAM NAVIGATION GUIDE.—Alphabetically arranged, giving 600 Routes with names of Steamers—time of starting—where from—where to—Fares, &c.  
RAILROAD GAZETTEER.—With general information of interest to Tourists.  
MAPS OF RAILROAD CENTERS.—Showing at a glance how Railroads diverge—giving page of Table in Guide. The whole work accompanied by a large acrographic  
RAILROAD MAP, COMPILED FROM OFFICIAL SOURCES.  
DINSMORE & CO.,  
Publishers, No. 9 Spruce St., N. Y.



**WAREHOUSE**

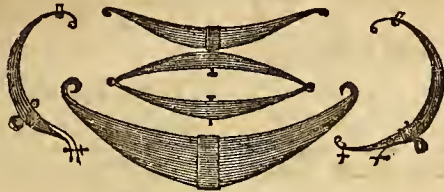
No. 5 FRONT STREET,  
Opposite Public Landing,  
Cincinnati, O.

**PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."**

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

**MCDANIEL & HORNER,****LOCOMOTIVE AND CAR SPRING MANUFACTURERS, WILMINGTON, DEL.**

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

**References.**

NORRIS BROTHER'S, Locomotive Builders, Philad.  
A. C. GRAY, Prest. New Castle Manuf. Co.  
U. WELLS, R. R. Car Manuf. Petersburg, Va.  
I. R. TRIMBLE, Supt. Philad. R.R. Co.  
May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga  
EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga  
THOMAS DOUGHERTY, Master Mach. do.  
THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va

**ALBERT M. LEA,  
CIVIL ENGINEER,  
KNOXVILLE, TENN.****New Works on Civil Engineering.**

THE Field Practice of Laying out Circular Curve for Railroads. By John C. Trautwine, Civil Engineer. 4th Thousand, in pocket-book form with tucks.

—ALSO—

A New Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Tables and 10 Engraved Plates of Diagrams. By John C. Trautwine, C. E.; 2d edition.

Price, one dollar each. Postage on the Curves, five cents; on the Excavations and Embankments, eight cents. For sale by WILLIAM HAMILTON.

Hall of the Franklin Institute.  
Philadelphia, Pa.

Sept. 21-3\*

**HOYT'S WATER GAUGE**

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

**RAILROAD IRON.**

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

feb19-1m

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

**BUSH & LOBDELL,  
Wilmington - - - - - Delaware.**

MANUFACTURERS OF

**CHILLED WHEELS**

AND

**TIRES,**

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,  
EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

**WHEELS FITTED**

To Hammered or Rolled Axles.  
In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Harlan & Hollingsworth,  
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
**MACHINERY.**

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

oc2

**Union Works, Baltimore.****POOLE & HUNT,**

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

ANDERSON, GATES & WRIGHT,

**STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,**

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to Jacob Ernst.)  
112, Main Street, Cincinnati.

**J. T. CRAPSEY,  
ATTORNEY AT LAW,**

OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

**SCHENECTADY****Locomotive Works,**

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

**LOCOMOTIVE ENGINES,**

AND TENDERS, AND

**RAILROAD MACHINERY**

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Au23,1y



**GENERAL  
RAILWAY SUPPLY AGENCY.  
SNOOK & HILL'S PATENT  
LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for building of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas filters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**

**Mechanical Engineer,**

AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

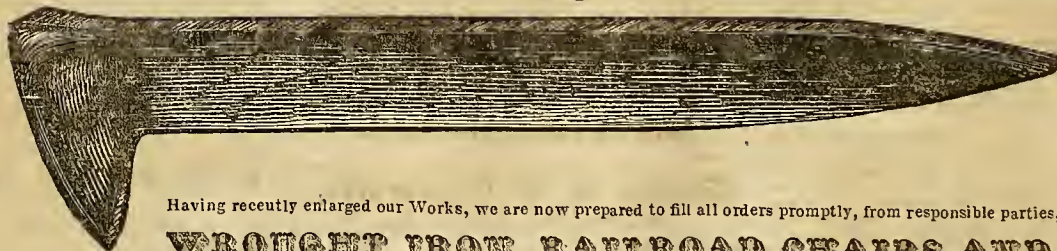
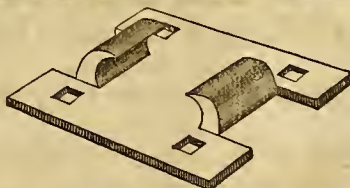
Applications for Letters Patent. Careful written  
Opinions of Inventors. Important aid in bringing out  
inventions. oc23

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an Improved Method. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.17

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**

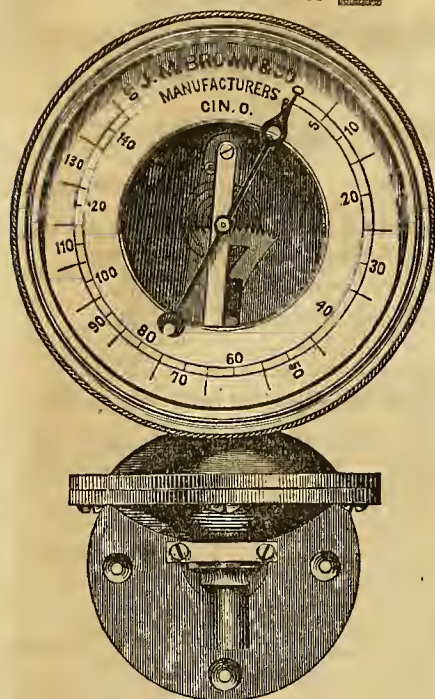


The Omnibuses will call for passengers by leaving  
their names at either of the Ticket Offices.  
W. H. SMITH, Agent.



**J. M. BROWN & CO.,**

MANUFACTURERS OF



**IMPROVED**  
**Corrugated Steel Spring Gauges,**

FOR

LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Frontstreet, Cincinnati, O.



**Prosser's Patent**  
**LAP-WELDED**  
**IRON BOILER TUBES,**

every article necessary to

DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tycres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

**Norris' Locomotive Works.**

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS &amp; SON.

**IRON BOILER FLUES**  
**PASCAL IRON WORKS.**

**MORRIS, TASKER & CO.,**

Manufacturers of

**LAP-WELDED BOILER FLUES,**

1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES.**

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.

PHILADELPHIA.

**RAILROAD IRON.****LOCOMOTIVES.**

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. H. GOODMAN & CO.,  
Feb 7, '66-2m.1 no. 7 Wall st., N.

**RAILROAD CAR**

AND

**COACH TRIMMINGS.****DOREMUS & NIXON**

No 21 Park Place, and 18 Murray st.,

NEW YORK,

**IMPORTERS**

OF

**Plain and Figured Mohair Plush.**

Printed &amp; Unrent do., Entirely New Designs;

MOQUETTES &amp; VELVET CARPETS;

Embossed Cloth, for seats &amp; backs of Cars

ROPE MATTING, Every Width.

Oil Cloths for Head Linings, Enamelled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT.****FOR CUSHION & MATTRESS FILLING**

N. B. We have the Plush in bond for exportation.  
sept 18 DOREMUS & NIXON

**W. G. ATKINSON,**

Civil Engineer, Surveyor &amp; Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skilful artists. Mines explored, new Works laid off, and Geological plans prepared.

**The Kentucky Military Institute.**

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

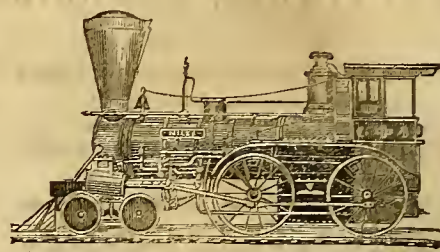
The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

Aug 14-1y

P. DUDLEY,  
President of the Board.**CINCINNATI**  
**LOCOMOTIVE WORKS.**

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE &amp; RICHARDSON.

**Railroad Car Findings**

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS**

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trimmings  
for wind and Seats. Varnish, Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.  
Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.

† oct 6.

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Huse Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

1 LVER MEAL. (The big best prize) awarded to these pumps at Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855 1



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, OCTOBER 29, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

BY WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 35.

#### EDITORIAL.

Soule's Excavator.....	553
How to Make Railroads Less Unprofitable.....	553
St. Charles Branch R. R., Mo.....	554
Dubuque & Pacific R. R. Land Grants.....	554
Nashville & Northwestern R. R.....	554

#### RAILROADS.

Alabama & Florida R. R. of Florida.....	554
Tennessee & Alabama R. R.....	554
Ohio & Mississippi R. R.....	559

#### MISCELLANEOUS.

Pennsylvania Relief Bill.....	556
Convention of Railroad Managers.....	557
New York Canals.....	558
Bank of England Notes.....	558
A Paying Road.....	559
Condition of the Louisiana Treasury.....	560
Railroad Receipts.....	560
The Crops of 1858.....	569

#### MONEY AND STOCKS.

Sales at the New York Stock Board.....	560
Monetary and Commercial.....	560

### SOULE'S EXCAVATOR.

We have been shown a model of this self-loading cart, and it seems to us to be a valuable invention. Immediately behind the cart is a scraper drawn by the cart. This scraper is elevated by the revolution of the wheel, and dumps its load into the cart. When the cart is full, the scraper is fastened by a chain, and the cart proceeds to the dumping spot. The additional weight of the scraper is trifling, and forms no serious objection to the cart.

In loose or sandy soils, Soule's Excavator must be a very valuable acquisition to the contractor. And the inventor claims that it will work equally well where the plow is used to loosen the ground.

### HOW TO MAKE RAILROADS LESS UNPROFITABLE.

This is a serious question, not merely to Railroad proprietors or bondholders, but to the public. The loss on railroads, if there be any, is a public loss, as the gain on them is unquestionably that of the public. We have just seen, in the National Intelligencer, an able article from the pen of Charles Ellet, jr. Some review of his article, portions of which we shall republish, may be interesting to our readers.

In the first place, Mr. Ellet assumes that a Railroad is, at this time, as indispensable a machine as the steam engine, which drives a boat or a mill. In this no one will dispute him. The world having once had the experience of such a useful invention, will never let it go. But Mr. Ellet well observes that the public can hardly have a proper idea of the immense amount of business that is done by one road. He takes the Erie Road for an example, and says that the freights amount to seven hundred thousand tons, which if it were put into barrels of flour, would reach from Wall street to the center of the earth! This is a strong illustration, but a just one.

Few persons have an idea of the immense work done by railroads. The work of the N. Y. & Erie is equal to thirty thousand locomotives making a trip of one hundred miles! Another illustration we might give is the influence on the Erie Canal. The vast freight business of that work has been diminished by one-half since 1853; which diminution has gone to the Railroads. In fact, it is now made certain that Canals can not exist near railroads, and all the money spent in the enlargement of the Erie Canal is entirely lost. That, however, is beside our purpose.

Mr. Ellet takes the general position that the cause of difficulty in railroads is inadequate tariffs. This is undoubtedly true, if the roads have carried freight below cost, or have not, in fact, allowed a reasonable profit. Here is a point on which most railroad managers have had little knowledge or wisdom. It is an extremely difficult thing to calculate exactly what is the cost of transporting a ton of freight one hundred miles. The elements of the calculation are what Mathematicians call variables. They are very uncertain. Still, it is necessary to know this element, and we should say that when that is ascertained, the rate of freight should be put at the cost, with a reasonable profit. Mr. Ellet lays down these principles: first, that each road make its own Tariff of Tolls, based on its own trade and calculations. It seems to us that this is undoubtedly the true method.

II. In arranging the tariff, let the first step be to ascertain the true cost of transportation upon the particular road for which the tariff is intended.

The actual cost of transportation is clearly the minimum limit of admissible reductions in

favor of those objects of transportation which are deemed, from motives of policy, most worthy of special encouragement.

There may be, and ought to be, material discriminations in every tariff. But no article ought to be conveyed for less than the actual cost of its transportation, fairly made out from the proper experience of the line.

This principle also may be admitted; for it can be nothing less but an absurdity for a road to carry freight at less than cost, under any circumstances. If what Mr. Ellet says below be true, our Railroad Managers must have been inoculated with folly in an extreme degree.

Having determined the true cost of transportation, and adopted that as a minimum charge, below which the toll on no article shall be suffered to fall, the company will be secured against one frequent source of immense extravagance—that of carrying freight for nothing, or less than nothing.

With this information in hand, it is practicable to construct a tariff of expenses, which should, in every case, precede the adoption of a tariff of charges.

Mr. Ellet next says:

III. The next step in the process should be to ascertain the highest charge which each article will bear.

This is also true, in order to ascertain what will be a prohibitory charge: for, undoubtedly the managers ought to do nothing to drive business from the road. But, we should say, —that if even the minimum cost was also a prohibitory charge, it ought to be put on; for in no case should the road carry for less than its cost. With these principles established, the conclusion necessarily follows, as expressed by Mr. Ellet:

IV. The true charge for each article and each position, it must be apparent, will be found somewhere between the actual cost of transportation and the prohibitory charge.

But where? In this also Mr. E. gives this general rule:

The next step in the construction of a toll-sheet should then be to form a third tariff, by adding together, for each article and each position, the cost of transportation and the prohibitory charge, and taking half their sum as a near approximation to that charge which will yield the greatest net revenue.

This is what is called a mean average, and is no doubt the mode of making a general rule. Whenever this general rule is prepared for adoption, there will, of course, be articles on which exceptions will be made. These, however, are few in number; and as we remarked, it can scarcely happen, that the tariff should ever be permitted to go below the minimum.

Mr. Ellet lays down a general rule, which we have not seen elsewhere; but, at first sight seems quite probable.

Yet there is no fact better susceptible of the strictest mathematical demonstration than this—that the charges which will yield the maximum net revenue on railroads doing a miscellaneous business must be from one to two cents per ton per mile greater than that which will produce the maximum gross revenue. If, then,



a company aims to obtain the greatest possible gross revenue, it can only succeed by a great sacrifice of dividends.

In fact, the gross receipts of a company may be enormous and yet insufficient to pay the expenses of transportation.

The last fact, we know. We presume the gross receipts of the Illinois Central are large; yet, we suspect it has never paid its expenses.

One or two things, we would remark, on Mr. Ellet's views. First, to make a Tariff of Tolls for a railroad doing a large business, on the principles laid down by Mr. Ellet, requires extensive calculation, and no small amount of mathematical acumen. The ordinary officers of railroads are not fitted for that business. In our opinion, the best thing some of our railroad companies can do, is to employ a man of mathematical talents to make their computations, necessary to establish a Tariff of Tolls, on those principles. Merchants employ accurate accountants to rectify their balances, and railroad companies need mathematicians to work for them.

Secondly, there is no more reason why railroads should not adopt a remunerative tariff, than there is why a wagon or a common road should not. The business of freights is now in their hands and it is absurd for them to do work and not charge enough for it. If the railroad companies adopt a moderately remunerative tariff, they will yet be profitable.

**ST. CHARLES BRANCH R. R., Mo.**—At a meeting of the persons forming the association for the construction of this road, held Oct. 10, the following gentlemen were elected directors:

Henry Stevens, F. H. Bowman, O. M. Butler, A. B. DeWolf, J. P. Furnald, E. Freeman, F. M. Kerwin, B. T. Hunt, R. J. Haines, T. A. Wheeler, Geo. Ferson, S. S. Jones, S. B. Flint.

**CIN. HAMILTON & DAYTON R. R.**—This road effected an important arrangement with the Cleveland, Columbus & Cincinnati R. R. at the recent Convention in Cleveland. Its cars will hereafter form a Cleveland connection via Delaware, without change.

**DUBUQUE & PACIFIC R. R. LAND GRANTS.**—We see it stated that the Government has opened, for pre-emption, the even numbered sections along the line of this road at the minimum price of \$2.50 per acre. This is an important step and will result beneficially to the road and the settlers. The same policy should be adopted towards all other land grant roads.

**NASHVILLE & NORTH WESTERN R. R.**—The following gentlemen have been elected directors of this road for the ensuing year:

President, V. K. Stephenson.

Directors, R. P. Marr, Fulton county, Ky., W. H. Gleason, John A. Gardner, Weakly county, Tenn., B. L. Allen, C. T. Wood, Carroll co., Tenn., V. K. Stephenson, W. F. Cooper, J. B. Johnson, A. H. Hicks, R. C. McFairry, M. Burnes, John Newson, Byrd Douglass, D. T. McGavock, W. T. Bang, Davidson county, Tenn.

## Railroads.

### ALABAMA & FLORIDA R. R. OF FLORIDA.

EDITORS OF THE RAILROAD RECORD: This road, lying in West Florida, extends its line from Tavvagona street, Pensacola, to the State line of Alabama—its exact distance being 45 miles and 274 feet. It is, in interests and the objects to be effected, identical with the Alabama & Florida Railroad of Alabama. The latter road extends from the point of junction with the Florida road, at the State line, 115 miles and 3367 feet, to the city of Montgomery, the wealthy and prosperous capital of the State of Alabama. The resulting distance between tide-water at Pensacola and the grand depot near the banks of the Alabama in the city of Montgomery, is 160 miles and 3,641 feet.

This new line of communication, considering its initial point on the Gulf of Mexico, at the superb and commodious harbor of Pensacola, as well as the immense sector of United States territory which its arms will embrace, may be justly claimed to be the most important work of improvement at present attracting the public attention. On its completion, St. Paul, Chicago, Cincinnati and New York, with hundreds of direct and collateral connections, will be brought into intimate relations with the Gulf of Mexico, at Pensacola. A slight inspection of the map shows how these relations by rail may, and indeed will, be extended to New Orleans, Shreveport, El Paso, and to the Pacific—thus enlarging the sector to a quadrant of dependent country. An equally cursory view of its inevitable exterior relations shows how the commerce of things and men of the Havana and the West Indies, of Tehuantepec and Mexico, of Panama and Central and Southern America, and of other Pacific and Trans-Pacific countries will, in time, come to pay tribute to Pensacola, the future Venice of America.

Besides the immense national and international advantages claimed for Pensacola and its railroad, the local advantages are such as to call for the construction of first class roads, and to assure profitable results from them under a wise, energetic and faithful administration, equal to those growing from the most favored roads of the country.

The whole line of road to Montgomery will be unsurpassed in its light gradients, easy curvatures, substantiality of structure, and in the productiveness of the mines, forests and fields of its immediate tributary country.

The recent decision of the Land Office at Washington will secure to the Alabama portion of the road at least 400,000 acres of land, whilst the amount ascertained and awarded to the Florida line is 217,760 20-100 acres. The possession of these acres, rich in the productions of the forest, and affording extensive tracts of first and second rate farming lands,

besides many mill sites, secures the early completion of the continuous road.

The grading of 47 miles in Conecuh county, Alabama, is about to be commenced by the enterprising contractors, Messrs. Milnor Broughton & Co., now engaged on the Florida portion of the road.

Hopes are confidently entertained of the completion of this great work by March, 1859.

The company in Florida, as at present organized, has its seat in Pensacola, and its affairs are managed by a President, eight Directors, Secretary, Treasurer, and Counsellor, the names of whom may be interesting to you to receive:

*President*—Major W. H. Chase, late of the Engineers U. S. Army.

*Secretary*—G. W. Hutton, Esq.

*Treasurer*—Hon. B. D. Wright.

*Counsellor*—R. L. Campbell, Esq.

*Directors*—Hon. O. M. Avery, A. L. Avery, Esq., Hon. A. E. Maxwell, Jose Siera, Esq., E. Simpson, Esq., Francis Bobe, Esq., Richard L. Campbell, Esq., Henry Hyer, Esq.

### TENNESSEE & ALABAMA R. R. CO.

Pursuant to the notice of the Secretary of the Tennessee & Alabama Railroad Company the fifth annual meeting of the stockholders was held at the office of the company in Franklin, on August 4.

The following gentlemen were elected Directors for the ensuing year: John Marshall, P. W. Baugh, T. F. Perkins, M. G. L. Claiborne, C. W. Nance, W. P. Cannon, H. G. W. Mayberry, B. M. Hughes, J. H. Wilson, Samuel Henderson, W. O. N. Perkins, C. H. Kinnard, S. H. Armstrong, E. Thompson and John McGavock.

The following is the report of the operations connected with the transportation department:

#### REPORT OF THE SUPERINTENDENT.

##### GROSS EARNINGS.

From transportation of passengers.....	\$36,562 4t
"                    freight.....	16,828 25
"                    mail.....	375 00

Total receipts.....	\$53,773 66
Total expenses (45 per cent.).....	24,367 73

Leaving a balance of net earnings (55 ¢ ct.).....	\$29,407 94
Gross earnings per mile.....	\$1,920 55
Expenses                    "                    ".....	870 27

Net earnings.....	\$1,050 28
No. of miles run by locomotive Franklin.....	23,267
"                    "                    Columbia.....	18,522

Total number of miles run.....	41,789
Number of passengers carried over the road.....	56,302
"                    "                    per day.....	155 48-100
"                    "                    carried one mile.....	1,085,836
Average dis. traveled by each passenger.....	19 1/2 miles.

The receipts, compared with those of last year, show an increase of \$14,189 42, while the expenses have increased only \$364 29.

The expenses would have been less but for the repairs upon the locomotives; having only two to do all the work upon the road, the expenses have necessarily increased to keep them in repair.

The freight and passenger receipts have both greatly increased, and will doubtless



continue to increase as the tracklaying extends south, and when it shall have reached Columbia the receipts will be quadrupled.

When the road is completed to its southern terminus, making the important connections it does, an epoch in the internal improvements of Tennessee will be reached unequalled in importance by any other, either completed, in course of construction, or in anticipation. Located in the most direct route from Louisville, Ky., and Nashville to Memphis, Mobile and New Orleans, it becomes the main connecting link between the Lakes of the North and the Gulf of the South, and in a social, commercial and political point of view it is of paramount importance to the whole country.

There are on the road now two first class passenger cars and one second class car, each of which has lately been repainted; ten eight wheel box cars; six platform cars; two stock cars; four ballast cars; two dirt cars, and one hand car. They have all been overhauled and put in good condition for the heavy business of the fall and winter.

#### REPORT OF THE ENGINEER.

At the beginning of the year just closed the only work in progress on the road was the extension from the station grounds in South Nashville to the present depot on Broad street. This was so far completed that trains commenced running over it the first day of September, 1856, and the largely increased business of the road since it was brought into use is the best evidence of the policy of building it. A large accession has been made to the grounds first obtained for depot purposes at the Broad street terminus, by purchasing the lot of Jacob McGavock, fronting one hundred and ninety-six feet on Summer street; and the increasing business will soon require the erection of suitable and sufficient buildings to accommodate it. As these buildings will be permanent, they must be so planned as to meet the future rather than the present wants of the road; or be so commenced as to be readily extended when greater facilities become necessary.

At the southern end the track has been lately extended to the new station buildings erected during the past year on the grounds donated to the road by Dr. Thompson, to which a very excellent turnpike road has been built for the accommodation of the public, principally at the expense of the railroad company, from the Franklin and Columbia turnpike. These additions make the length of main road now in use twenty-eight and four-tenth miles.

The Board having determined in November last to put the work under contract from opposite Spring Hill to the junction with the Central Southern Railroad near Columbia, and thence to Mount Pleasant, should the subscriptions applicable to the latter section justify it, the work was advertised to be let,

and in February and March contracts were made for the clearing, grading and masonry of the whole distance to Mount Pleasant, twenty and three-fourth miles, to be completed to the junction ready to receive the track by January 1st, 1859, and to Mount Pleasant by March 1st, 1859. Nearly the entire work of the latter section is taken by planters over whose lands the road is located, and who receive a considerable portion of the payments to them from the company in its capital stock, but not as much as the officers of the road were led to expect, and certainly not as much as they should have taken to help forward and encourage an enterprise from whose completion they will receive such immense benefit.

The superstructure for the bridges is not yet contracted for, neither are the cross-ties or ballast. With regard to the latter our experience shows most conclusively that it is not only an advantage to the road but an almost indispensable necessity to keeping it in good order. It may perhaps be dispensed with without serious detriment in a country of sandy or gravelly soil; but upon clay like that through which this road passes, a porous, substantial material is requisite to sustain the track, and allow free drainage of water from the cross-ties. The firmness and steadiness of the present road, its comparative smoothness, freedom from dust, and, above all, freedom from accident, prove that the expenditures made for ballasting in the beginning were highly judicious; not to mention the incidental advantages of increased durability of the cross-ties, and the effect of the broken stone to prevent cattle from lying or standing on the track.

The rolling stock has been increased during the year by four new freight cars from the manufactory of Vannoy & Turbiville, at Nashville, which were placed on the road in January last. In April a first class passenger locomotive was ordered from the Taunton Locomotive Works, to be delivered between the first and tenth of August, and late advices from the builders report it nearly ready for shipment. It is to be of twenty-two and a half tons weight, and from the high character of the manufacturers we may expect an engine equal in all respects, if not superior, to any now running in Middle Tennessee.

The following are the expenditures on account of construction during the year ending June 30, 1857:

Grading and Masonry.....	\$22,174 91
Bridging.....	2,119 52
Ballasting.....	1,548 14
Track Timber.....	492 71
Frogs.....	396 28
Chairs.....	89 82
Spikes.....	312 08
Switches.....	502 97
Track-laying.....	1,241 37
Buildings and Fixtures.....	3,082 61
Cars.....	3,160 00
Tools and Machinery.....	162 03
Commissions.....	650 00
Engineering.....	4,344 92
Contingencies, Incidental and Office Expenses.....	647 58
Total.....	\$40,835 04

The following are the distances to the most prominent points on the road:

	Miles.
Broad street, Nashville, to Thompson.....	23 4 10
to end of old grading, opp. Spring Hill.....	32 1/2
to junction with Cent. Southern R. R.....	43 1/2
to Mount Pleasant.....	54 3/4

During the course of the fiscal year just commenced, the operations of the company will be of some magnitude and importance, and a brief notice of them may be profitably made. From Spring Hill to Columbia three-fourths of the grading and nearly all the masonry should be finished, the bridge superstructures contracted for, and the cross-ties partially delivered. Beyond the junction, should it be decided to continue the work, it should be in nearly an equal state of forwardness. From the junction the Central Southern Railroad is under contract to Pulaski, and the work is progressing with great vigor. Thirty-five miles will be ready for the track by the first of March, 1859, and all the iron and equipment for it must pass over the Tennessee & Alabama Railroad to Columbia. Hence, in addition to the other reasons for completing the road to the junction by the close of the year 1858, is the detention that company must suffer in getting into operation should the completion of this be delayed. As one important step towards it, the iron should be provided for the track at as early a day as possible. When we recall the enormous prices forced upon the company for river freight, lighterage, &c., in the iron delivered in 1854, and the long delay in completing the track from want of material which could not be brought up the river on account of low water, they suggest the wisdom of arranging a sufficient time beforehand to avoid a repetition of those evils. Four miles are already graded beyond Thompson, while the adjoining sections are so light they can be made ready by the first of July or August, 1858, and track-laying should commence at Thompson by the first of October. It will proceed very slowly, for, owing to the want of suitable bridge timber on the road northern or Georgia pine must be brought by way of Nashville, taken on the railroad to within two or three miles of the location of each bridge, and hauled to the bridge site by wagons, and put up while the track is advancing. It is, therefore recommended that immediate steps be taken for the purchase of sufficient iron to lay the track from Thompson to the junction with the Central Southern Railroad. It is certainly a discouraging time to negotiate with the State bonds at 82 cents in the New York market, but the prospect of improvement in their price is far from flattering; while the manufacture, shipment and delivery of a large quantity of rails is a work of many months, and they can usually be bought on better terms where ample time is given the manufacturer to fill the order.

The result of the operations of the com-



leted road for the year just closed is certainly very cheering to the stockholders. With a road twenty-eight and a half miles long, alongside one of the best turnpike roads in Tennessee, on which the heavy wagoning has scarce diminished perceptibly, its rapidly increasing and already large receipts are an indication of what they will be when the railroad shall be extended to the south bank of Duck river, where its greater economy, certainty and rapidity will control the freight of the country as it now does the passengers. And when the Central Southern Railroad is completed to Decatur, and the connection formed with the Memphis & Charleston Railroad, and through it with the roads terminating at Memphis, New Orleans and Mobile, the through passenger travel to and from these cities and the North must pass over this part of the Tennessee & Alabama Railroad, swelling its revenues to a sum at which we can only approximate, but which may amount to five times the receipts of the past year. But, to permanently retain that through business, the completion of the road to its southern junction with the New Orleans and Mobile Railroads becomes indispensable; for the roads now in progress in West Tennessee, with their connections in Middle Tennessee and Kentucky, will furnish shorter and more direct communication with the Gulf ports than the circuitous route by Decatur, and in no other way can it be prevented from taking those lines than to furnish a more direct one. This road, as projected, will be the shortest and best that can be obtained between Louisville and Cincinnati, in the Ohio river valley, and the Gulf ports; and when built will always remain secure of the vast trade of which it is the legitimate outlet.

#### PENNSYLVANIA RELIEF BILL.

The following is the bill which passed both houses of the Pennsylvania Legislature for the relief of the institutions which forfeited their charters by suspending specie payments: AN ACT providing for the resumption of specie payments by the banks, and for the relief of debtors.

SECTION 1. Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in General Assembly met, and it is hereby enacted by the authority of the same: That the provisions of every act of Assembly, or of incorporation, or re-incorporation, heretofore passed, declaring or authorizing the forfeiture of any bank, saving, trust, and insurance company, or corporation having banking privileges, or inflicting any penalties, or authorizing any compulsory assignment, for or by reason of the non-payment of any of its liabilities, or the issuing or paying out the notes of other banks incorporated under the laws of this Commonwealth, though not specie paying, or its loaning or discounting without the requisite amount of specie or specie funds, since the first day of September, Anno Domini, one thousand eight hundred and fifty-seven, be and the same are hereby suspended until the second Monday of

April, Anno Domini one thousand eight hundred and fifty-eight, and all forfeitures and penalties or liability thereto heretofore incurred, or that may be hereafter incurred before the said 2nd Monday of April, under such acts of Assembly or of incorporation or re-incorporation, for or by reason of the causes aforesaid, or any of them, are hereby remitted, and so much thereof as prohibits any bank from making loans and discounts, issuing its own notes, or the notes of other banks incorporated under the laws of this Commonwealth, though not specie paying or declaring dividends during the suspension of specie payments, or from loaning or discounting without the requisite amount of specie or specie funds as aforesaid, be, and the same is hereby, suspended until the day and year aforesaid, and any such bank, during such suspension of specie payments, may declare dividends to an amount not exceeding six per cent. per annum on its capital; and this act shall extend also to all banks, saving, trust, and insurance companies, and corporations with banking privileges, chartered or re-chartered under any law, for periods hereafter to commence, and to the payment of stock to all banks incorporated by the Legislature at its last session.

SEC. 2. That, in addition to all statements and returns now required by law, each and every bank in the cities of Philadelphia, Pittsburgh and Allegheny shall, on the first discount day in January next, and weekly thereafter, and every other bank in the Commonwealth, on the same day, and monthly thereafter, make up a statement, to be verified by the oath or affirmation of the President or Cashier thereof, showing—first, the amount of its loans and discounts; second, the amount of specie in the possession of and owned by such bank, and the balance due from other banks, in distinct items; third, the amount of its notes outstanding; fourth, the amount of deposits, including individual deposits and balances due to other banks; which statements shall be published in the next succeeding issue of a newspaper of the county in which the bank is located, or if there be no newspaper in such county, then in a newspaper of some neighboring county; and any violation of this law, or failure to comply with its provisions by any President or any Cashier of any bank, shall be a misdemeanor, and each of the said officers shall, upon conviction thereof, be punished by a fine of not less than five hundred dollars, nor more than one thousand dollars, at the discretion of the court; one-half to be given to the prosecutor, and one-half to the county in which such bank is located.

SEC. 3. That the said banks are hereby required, until the second Monday of April aforesaid, to receive at par, in payment of all debts due, or to become due to them, respectively, the notes of all the solvent banks of the Commonwealth which paid specie for all their liabilities on and immediately prior to the first day of September last, and which shall continue solvent; and the said banks are also hereby authorized to pay out, in all their business transactions and discounts, the said notes, so long as the banks issuing the same shall remain solvent; but in case any President, and a majority of the Board of Directors of any of the said banks shall certify to the Governor, under oath or affirmation of the President, his apprehension and belief that any bank in said certificate named is in an unsafe condition, the Governor shall thereupon appoint three judicious persons not interested in said bank, as commissioners, to

investigate the condition of such bank; and the said commissioners shall, after taking an oath or affirmation to perform the duties of their appointment with fidelity, forthwith proceed to make the said investigation, and report the result thereof within ten days to the Governor; and if the officers of the said bank shall refuse to permit the said commissioners to make such investigation, or to produce any books or documents necessary for that purpose, or if the said commissioners, or a majority of them, shall report that the said bank is in an unsafe condition, the Governor shall thereupon issue his proclamation declaring the charter of the said bank to be forfeited, and the said bank shall be deprived of all the benefits of this act, and the Directors thereof shall forthwith make and execute an assignment in the manner provided by the act entitled "An act regulating banks," approved the sixteenth day of April, Anno Domini eighteen hundred and fifty, and the expenses of such commission, including the compensation of the commissioners, at eight dollars per day each, shall be paid by the bank against which it is issued, unless the report shall be favorable to its condition, in which case they shall be paid by the applicants; but any bank or banks which shall, before the period herebefore limited, resume and continue the payment of specie on all their liabilities, shall not, after such resumption and during such continuance, be subject to any of the provisions of this section: *Provided*, that no bank shall be required to receive the notes of any bank against which a certificate may be made as aforesaid, at any time after the delivery of the same to the Governor, until the commissioners shall report in favor of such bank, after which the notes of such bank shall again be received as required by the provisions of this section.

SEC. 4. That the several collectors of taxes, tolls, and other revenues of the Commonwealth, and also county treasurers, are hereby authorized to receive, for State purposes, the notes of the solvent banks of this Commonwealth, though not specie paying banks; in payment of the said taxes, toll and revenues, and the State Treasurer is hereby authorized to receive and receipt for the same in the same manner as though said banks were specie paying.

SEC. 5. That the deposits by the State Treasurer, or to the credit of the Commonwealth, in the several banks and other corporations, and all bank notes which are now or may hereafter be in the Treasury during the period of suspension aforesaid shall, from time to time, on demand of the said Treasurer, be paid by the said banks or other corporations, respectively, in specie, in such amounts as may be required by said Treasurer, to enable him to pay the interest accruing on the public loans of the Commonwealth.

SEC. 6. That upon all judgments heretofore entered in suits commenced by writ or otherwise, or which may be entered during the period hereinbefore mentioned, in actions instituted by writ or otherwise, in any court in this Commonwealth, or before any alderman or justice of the peace, on judgments obtained before said officers, if the defendant shall be possessed of any estate in fee simple, within the respective county, worth, in the opinion of the court, alderman or justice, the amount of the said judgment over and above all incumbrances, and the amount exempted from levy and sale on execution, he shall be entitled to a stay of execution thereon on judgment now obtained, or to be obtained on



suits now brought, for the term of one year from the date of the passage of this act, and on all others for one year, to be computed from the first day of the term to which the action was commenced; and every defendant in such judgment may have the same stay of execution thereon, if within thirty days from the passage of this act, or within thirty days from the rendition of any future judgment, he shall give security to be approved of by the court or by a judge thereof, or by such alderman or justice of the peace before whom such judgment was obtained, for the sum recovered, together with the interest and costs: *Provided*, That this section shall not apply to the wages of labor, nor to debts upon which stay of execution is expressly waived by the debtors, nor to judgments upon which a stay of execution has already been taken under existing laws: *And provided*, That the provisions of this section shall extend to judgments entered or to be entered, as well upon bond and warrant of attorney as upon mortgages to secure the same, and to any subsequent grantee or owners of the premises so bound, as well as to the original obligor or mortgagor: *Provided, further*, That said stay of execution shall not apply to judgments or mortgages, or on bonds secured by mortgage, unless the interest thereon shall be paid within sixty days after the accruing of the same, in such funds as the banks are authorized by this act to use.

SEC. 7. This act shall take effect immediately, except the 3d section, which shall not go into operation until the provisions of this act are accepted as herein provided; but no bank or other corporation shall be embraced within its provisions more than thirty days after the passage hereof, or after any bank shall have suspended specie payments upon its notes or obligations, unless the stockholders of such bank or other corporation shall, before the expiration of the said thirty days, or within thirty days after any bank shall have suspended specie payments upon its notes or obligations, at a meeting to be called by the Directors thereof for that purpose, on ten days' public notice in one or more newspapers, accept the provisions of this act by a majority of votes of said stockholders, to be voted and counted according to the provisions in the charter of such accepting bank or other corporation, regulating the election of Directors; but to make such acceptance valid there shall be filed in the office of the Auditor General of the Commonwealth a certificate that this act has been duly accepted under the common seal of such bank or other corporation, attested by the signature of its President or Cashier. And each of the said banks accepting the provisions of this act shall also pay into the Treasury of the Commonwealth, on or before the first day of January, Anno Domini one thousand eight hundred and fifty-eight, or within thirty days after any bank shall accept the provisions of this act, a sum equal to one-fourth of one per centum upon the capital stock of said bank, in addition to any amounts they are now by law required to pay.

SEC. 8. That the 47th section of the act approved April 16, 1850, entitled "An act regulating banks," be, and the same is hereby repealed: *Provided*, That all suits brought or now pending for forfeiture or penalties under the section hereby repealed shall not be effected thereby.

SEC. 9. That the Legislature hereby reserve the right and power to alter, revoke, or annul the charters of any bank or banks, corporation or corporations, accepting the pro-

visions of this act, whenever, in their opinion, the same may prove injurious to the citizens of the Commonwealth, in such manner, however, as to do no injustice to the corporators.

SEC. 10. That no bank, savings' fund, insurance, or trust company shall, directly or indirectly, purchase, or be concerned in the purchase of, the notes of any of the incorporated banks of this State at less than their par value; and any and every of the officers of said institutions violating the provisions of this section shall be deemed guilty of a misdemeanor, punishable, upon conviction, by a fine of not less than five hundred dollars, nor more than one thousand dollars, one-half to be paid to the informer, and the other half to the use of the Commonwealth.

SEC. 11. That no stocks, bonds, promissory notes, personal property, or other valuable securities, hypothecated or held in pledge, either with power of attorney or otherwise, for credit or money loaned, shall be sold for the period of six months from the passage of this act without the consent of the debtor, debtors, or party hypothecating or pledging the same being first had and obtained in writing.

SEC. 12. That the notice required for payment, provided in the charters of savings' fund and trust companies, in all sums exceeding one hundred dollars, be, and the same is hereby extended for the period of two months during the period of suspension of specie payment authorized by this act.

#### CONVENTION OF RAILROAD MANAGERS.

The Convention of Railroad Managers, which met in Cleveland on Oct. 14, took the following final action on the questions that have been recently raised in regard to railroad management and reform, for the report of which we are indebted to the Cincinnati *Commercial*:

1st. *Resolved*, That neither company shall, hereafter, either directly or indirectly, employ runners or agents of any description for the purpose of soliciting passengers, or allow any compensation, by way of commission, drawback, or otherwise, for procuring such passenger business; but each party shall be at liberty to employ one person as a traveling agent to inquire into the sale of tickets by connecting roads over the line of road represented by such agent, in order to ascertain if the company such agent represents is fairly treated. Each company whose road terminates at any river or lake port may also employ not exceeding two runners or agents to procure passengers as against water craft only. Such agents may be paid by the several companies forming the line so terminating. It is further agreed that the parties hereto will dispense with the runners herein provided for so soon as steamboat companies or owners will with theirs. It is understood that any Western company shall have the right to open or retain an office in New York, Boston, Philadelphia or Baltimore, for the sale of tickets, until such time as satisfactory and just arrangements can be made with the Eastern companies for the transaction of their passenger business—it being agreed that no runner, bill poster or solicitor shall be employed.

On motion of J. B. Anderson, of the New Albany & Salem Railroad, the Evansville & Crawfordsville Railroad was allowed to issue posters and hand bills as against water craft at Evansville.

2d. *Resolved*, That an increase on all rates of freights is required and expedient at this time; that the rates be made uniform between competing points by all lines; that the shortest lines between such competing points shall fix the rates, provided that the same shall not be less than 1½ cents per ton per mile on the lowest class of freights, which shall not be changed unless on ten days' previous notice in writing, and that the classification now in use be continued. No line shall employ more than one man as freight agent or solicitor of freight at Boston, New York, Philadelphia or Baltimore, or at the principal lake and river ports in the West, or make any arrangement for the use of cars or otherwise, by which less than full rates shall be received. No line shall allow any drawback or commission for procuring freight—that an addition of not less than ten per cent. on regular *all rail* rates shall be charged by all express freight companies giving time receipts over any line, or by any railroad company giving or accepting time receipts independent of such express freight companies.

Pending the discussion upon the above, Mr. Hubby moved to strike out the words "that the shortest lines between such competing points shall fix the rates," which the convention refused to do, by a vote of 27 to 13 roads.

3d. *Resolved*, That no annual pass shall be issued by any company, except to the President, Superintendent, General Ticket Agent, General Freight Agent, Lost Baggage Agent, and one General Traveling Agent, and agents searching for stray freight or cars of such connecting lines as it may have ticket or freight arrangements with; to the editors of papers located in any county through which the line of said railroad may pass; and after Nov. 1st, 1857, that no trip pass shall be issued except for strictly charitable purposes; and no special passes except to employees of the company and owners or drovers accompanying their stock, not exceeding one in number for each two cars, two for four cars, three for eight cars, and not more than four to ten cars or more, and return passes to the same persons, good for thirty days; and no road shall pass any person or persons over its line upon the pass ticket of any other road, or the letter or request of the officers of any other road.

4th. No company shall hereafter issue, or cause to be issued, any bill or poster—except such as may be permanently enclosed and protected in frames—and all advertisements shall be limited only to a true statement of the distance, direction and connections of the particular route, the exact time of the several trains, and the rates of fare, and shall not contain any reference to competing routes.

5th. That each and every road common to two or more competing roads, or lines of roads, shall in every instance act fairly, and impartially, and in a spirit of strict neutrality in the sale of tickets or the contracting for freight over the competing lines connecting with such road. Any variation from this principle shall be considered a violation of the compact between the companies herein represented, and shall be a matter of reference, and treated the same as any other violation.

6th. The rates of passenger fare on competing lines to all points shall be uniform, and shall be fixed by the shortest lines between such competing points, which rates shall not be changed unless on ten days' previous notice in writing; that such rates shall not be



less than two and one-half cents per mile per passenger: Provided, that no line be required to bring the through fare above the sum of the local fares of the several roads composing the shortest line, and baggage may be checked between the termini of their western connections on the Ohio and Mississippi rivers.—Eighty pounds of baggage shall be allowed to each first class passenger. All extra baggage shall be charged double first class freight rates. It shall be collected as far as the baggage is checked, a manifest sent with it, and the proportions reported to the several roads, and paid in ticket balances. Emigrant baggage shall be charged such rates as the General Freight Agents of connecting lines may determine.

7th. That no first and second class or emigrant tickets shall be sold so as to carry passengers over one portion of a line by first class tickets, and the remaining portion on a second class or emigrant ticket.

8th. Whenever any freight marked and consigned to any line shall be diverted from its proper channel, and carried by a competing line, the line so deprived of its freight may claim and receive from the company or companies who first divert the freight from the route designated the amount which it would have received if such freight had not been diverted.

9th. That a committee of three be appointed to prepare a contract embodying the principles established by this convention, to be signed by the companies represented in the same.

10th. That the umpires to settle all questions which may arise under this contract shall be constituted thus: the five east and west lines to select one person; the line north of and including the Pittsburg, Fort Wayne & Chicago, the second person; and the lines south of the Fort Wayne Road the third person.

11th. The umpires here constituted shall have the right to refer any question of difference to some suitable and disinterested person near to the parties who may make such complaint, to examine and report the facts in regard to such difference.

12th. That it shall be the duty of such umpire to proceed immediately upon complaint made, to examine and determine the matter in controversy.

13th. If any company represented in this convention, or any company not so represented, upon notice in writing from the Publishing Committee of the resolutions of the convention, shall refuse to concur in the same, or shall violate or neglect to carry out any of its provisions, or for ten days after notice of its violation, which may be given by any company whose interests are injured thereby, to make due explanation or correction of the abuse, the company so offending shall be considered as having violated the contract; and when its violation shall have been fully made out to the satisfaction of the umpires hereinbefore provided for, they shall give immediate notice thereof to the parties hereto, who shall thereupon discontinue the sale of tickets over said road, or to allow said company to sell or issue coupon tickets, and will also decline to receipt freight over or to allow their cars to run upon or over said road, and that the four Eastern lines be requested in all cases to apply the same remedy whenever such fact is established, and they duly notified thereof; and the committee on printing the report of this convention are hereby instructed to send a copy of the foregoing proceedings to the

Presidents of all roads not represented in this convention, and ask their concurrence therein.

14th. That this Convention concurs in the opinion embodied in the agreement of the 7th of September, between the New York Central Railroad Co., the New York & Erie Railroad Co., the Pennsylvania Railroad Co. and the Baltimore & Ohio Railroad Co., that it is for the general railway interest that railroad companies West of Suspension Bridge, Buffalo and the Ohio river should not maintain independent passenger agencies of any grade in the Atlantic cities, if equitable arrangements can be made by conference and negotiation for the distribution of business.

15th. That a committee of ten be appointed by the chair to confer with the Eastern Railroad Companies, including the Grand Trunk Railway of Canada, as to the proper plan and detail thereof, which shall insure to the Western Companies such representation in the great seaports of the country as the magnitude of the interest involved demands, and which shall be equitable, effective, and economical.

16th. That this Convention suggest as a plan the union of all railway interests in one office or clearing house, in New York and such other Atlantic cities as may be necessary.

17th. That a copy of these resolutions be furnished to the President of each of the Eastern lines by the President of this Convention.

18th. That a committee of three be appointed by the Chair to publish the proceedings of this Convention, and that the expense attending such publication be collected of the companies represented.

The Chair appointed as such committee Messrs. Flint, Phillips and Nettingham.

19th. That the reforms contemplated under the contracts shall take effect on the first day of November next.

20th. That the thanks of the meeting be presented to the proprietor of the Grays' Armory, for the use of the room.

The Chair announced as the committee to prepare contract, Alfred Kelly, G. W. Cass and Wm. Dennison.

The Chair announced as the committee of ten to confer with the Eastern Railroad Companies:

Wm. Case, J. W. Brooks, C. J. Bridges, S. S. L'Hommedieu, J. L. Jewett, G. W. Cass, C. M. C. G. Hammond H. C. Lord, J. S. Newman.

The meeting of General Freight Agents adjourned to meet in New York City on Thursday next, the 22d inst., to confer with the four Eastern Roads as to winter rates, on eastward and westward bound freight, having failed to harmonize in the adoption of rates at this place.

The adjourned General Convention decided it had no power to act on the General Freight Agents' proceedings, and therefore adjourned, suggesting to the General Freight Agents another meeting to determine upon permanent rates, as authorized by the resolutions of the General Convention.

Before adjournment the following stock rates were agreed upon:

#### STOCK RATES TO BUFFALO, FROM NOV. 1.

From	East St. Louis.....	Per Car Load.	Hogs.
"	Alton.....	\$170	\$145
"	Bunker Hill.....	165	142
"	Litchfield.....	160	140
"	Hillsboro.....	155	135
"	Pana.....	152	132
"	Shelbyville.....	147	130
"	Windsor.....	145	125
"	Mattoon.....	144	124
"	Terre Haute.....	143	123
"	Chicago.....	135	105

"	Lafayette.....	110	96
"	Logansport.....	103	..
"	Indianapolis.....	102	90
"	Naples.....	170	145
"	Jacksonville.....	168	143
"	Springfield.....	160	125
"	Decatur.....	150	120
"	Tolono.....	145	125
"	Okaw.....	155	122
"	Peoria.....	165	142

Rates on live Stock for short distances, by competing lines, viz:

For 10 miles and under.....	60 cents per mile.
" 20 " " " " " " " " " "	50 " " " " " "
" 30 " " " " " " " " " "	40 " " " " " "
" 40 " " " " " " " " " "	35 " " " " " "
" 60 " " " " " " " " " "	30 " " " " " "
" 80 " " " " " " " " " "	25 " " " " " "
" 100 " " " " " " " " " "	20 " " " " " "
And for any distance over 100 miles.	20 " " " " " "

#### NEW YORK CANALS.

At a meeting of the Canal Board, this morning, Mr. Auditor Benton submitted an important plan for relieving forwarders, and community generally interested in having the produce of the country brought to market. The plan is to the effect that Banks having the funds of the State shall receive the checks of Forwarders, the Banks holding the Bills of Lading as security.

Thus practically the State furnishes funds to move produce to market, put the Forwarders in business, make business for the Canals, and afford relief which reaches all classes of community.

For this most timely and important measure of relief, Mr. Auditor Benton is deserving and will receive the thanks especially of all Canal men, and not less of the whole State.

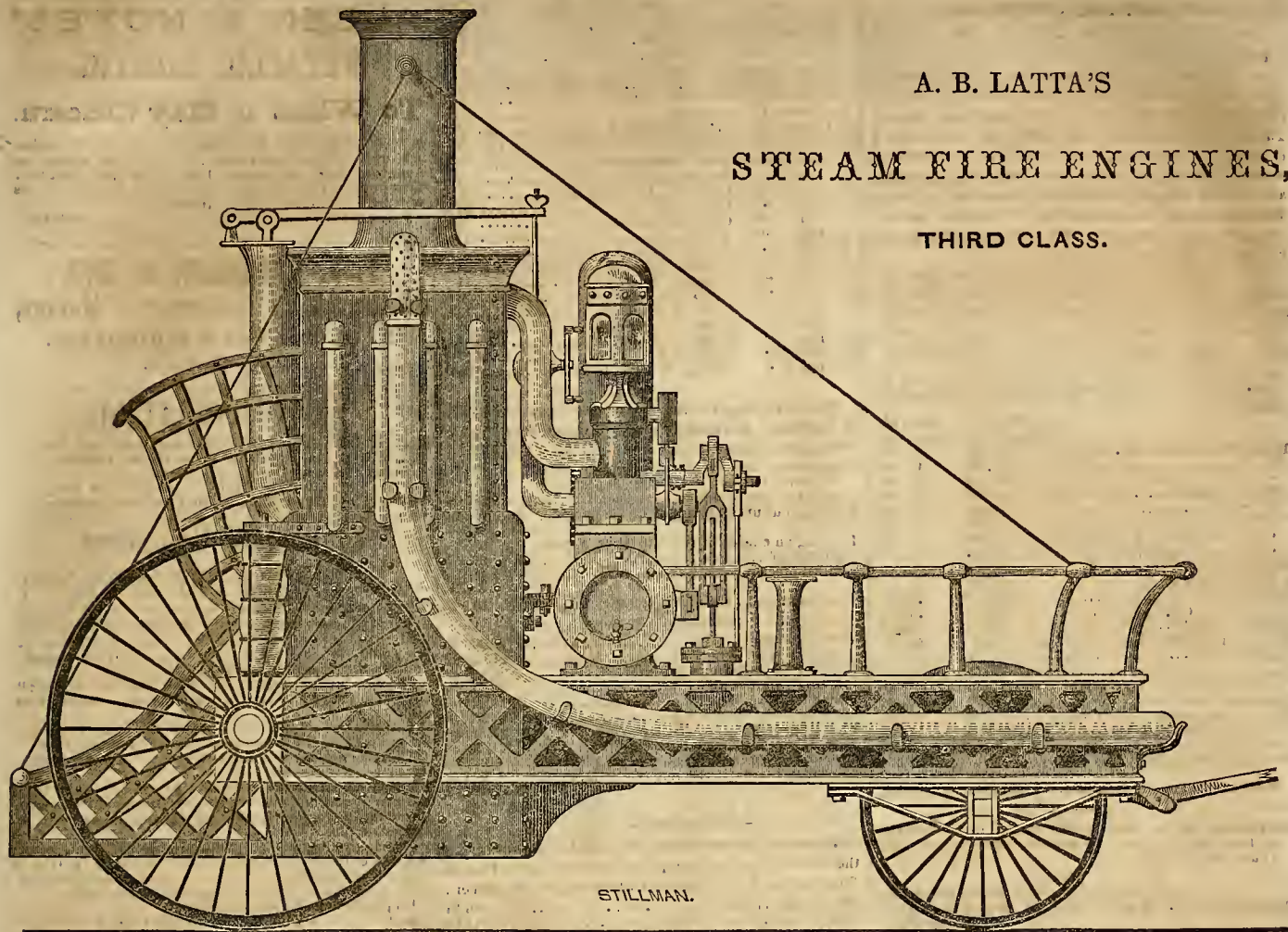
It is the wise measure of a faithful and capable public officer, devoting his energies to the welfare of the State and community. The measure having been promptly adopted by the Canal Board, in a few days the Erie Canal will swarm again with boats laden with the rich products of the country, bound to a market that otherwise might have been left bare.

It is in this way that by sagacity and energy the power and means of the State may be employed in rewarding labor, reviving business and lifting the country from the slough of despondency. It is fortunate that at a time like this we have a man like Nathaniel S. Benton, and a Canal Board to back him, at the head of affairs.

The Canal Board also resolved to receive for tolls the bills of the banks of this State in good credit.—*Albany Statesman.*

A Bank of England note has some peculiar and interesting characteristics of manufacture, the paper being distinguished by its color, which is a peculiar white, such as is neither sold in shops nor used for any other purpose; by its thinness and transparency, qualities which prevent any of the printed part of the note being washed out by turpentine, or removed by the knife, unless a hole is made in the place thus practiced on; by its characteristic feel, a peculiar crispness and toughness, which those accustomed to handle it distinguish the true notes instantly; the wire or water mark, which is produced on the paper when in the state of pulp, and which is easily distinguished from a mark stamped on after the paper is completed; the three "deckle" edges—the mould contains two notes placed lengthwise, which are separated by a knife at a future stage of the process—this deckle or wooden frame of the paper mould producing the peculiar effect seen on edges of uncut paper, and this edging, being caused when the paper is in a state of pulp, precludes any successful imitation after the paper is made; also by the strength of the paper, which is made from new linen and cotton. The Bank of England never re-issues a note. It issues only new notes, and no note below £5.





The above cut represents one of A. B. LATTA'S 3rd class Steam Fire Engines. This machine is very different in its construction to some of those built by the Latta Brothers heretofore, it is much improved in style and compactness, as well as convenience.

This Machine is calculated to be drawn by hand, as any hand engine is drawn, or by two horses, who are capable of drawing it anywhere through a city.

It is now reduced to a certainty that every city in the Union is to use steam for extinguishing fires. After nearly five years experience here, no one doubts the entire reliability of these machines. The wonder to us, is, why other cities have been burning so much property up and have been so slow to take hold, while others

are now using and ordering more of these engines.

It is rather strange that since A. B. Latta built his first Steam Fire Engine, in 1852, that so many others have attempted to get them up, but *all* have failed to work successfully, from some cause or other, which failures have retarded the introduction of the Steam Engine. It is now established that the Latta Engine is the *only one* entirely successful.

Our city has lost less property, in proportion to her size, than any other city in the Union, but has the most efficient Fire Department on the Globe.

These machines are capable of being turned in the narrowest streets, and are run at the highest speed of the fleetest horses. They get

steam up in *five* minutes and will throw  $1\frac{1}{2}$  inch stream 200 feet horizontally; they take water from cisterns, or from common plugs, such as are used in most cities.

There are scarcely any who attend fires here, except strangers, who visit our fires to see the working of these steamers. Seven of them are in use here.

The Insurance Companies of every city should endeavor to introduce these engines in their respective cities, as no one is more interested than they are. We hope, ere long, that every fire will be extinguished by steam.

To draw a comparison between hand and steam power, would be, to put a man in a canoe by the side of the "Great Eastern."

OHIO & MISS. R. R., WESTERN DIVISION.—The city of St. Louis has accepted the proposition of H. D. Bacon, Esq., for the re-transfer of this road to its stockholders. The county has accepted thirty per cent. of its debt in income bonds, having twenty years to run at 7 per cent. The company secure Page & Bacon for the debt due them by the issue of \$2,500,000 in construction bonds, and \$2,900,000 in income bonds, to be called respectively third and fourth mortgages.

ALABAMA & FLORIDA R. R.—The city council of Pensacola have passed the following resolution:

"RESOLVED, That should it become necessary in order to secure the iron rail and equipment for the Alabama and Florida Railroad in Florida, that the Mayor be and he is hereby authorized to endorse the bonds of the Alabama and Florida Railroad Company in Florida for an amount sufficient to procure said iron and equipment, the said Company to secure to the city by law or otherwise, on their property, the amount of the liability created by said endorsement.

A PAYING ROAD.—It is refreshing to know, says the *Troy Budget*, in these days of Railroad insolvency, that there is one road that pays something on the investments of its stockholders. The Rensselaer and Saratoga Railroad has just declared a dividend of four per cent. from the earnings of the last six months.

TO PRINTERS.—We have on hand a large assortment of chases, suitable for country offices. For sale cheap.



## MONETARY AND COMMERCIAL

The past week has been noted by no very stirring events in financial circles. The suspension of specie payments by the Eastern banks has given general satisfaction, and has tended greatly to the relief so much needed and desired. The old established banking house of Winslow, Lanier & Co., of New York, has suspended. This house has paid out over a million dollars since the commencement of the troubles and enjoyed the confidence of the community generally. With ample assets the impossibility of obtaining coin has compelled their suspension. We understand they intend to close their business.

The New Orleans banks suspended for a day or two but resumed again. This was a premature action on their part and it is to be feared will not result to the best advantage. The auditor of the State of Indiana has made the following statement of the condition of the Free Banks of that State.

STATEMENT OF CIRCULATION AND VALUE OF SECURITIES OF THE FREE BANKS UNDER THE AMENDED LAW, OCT. 15th, 1857.

	Present Circulation.	Value of Securities.
Bank of Goshen.....	52,154	58,373
" " Gosport.....	58,267	61,180
" " Mt. Vernon.....	49,189	52,800
" " Indiana.....	20,998	50,000
" " Paoli.....	51,457	54,029
" " Rockville.....	47,150	49,600
" " Salem, New Albany.....	45,500	47,775
" " Salem, Salem.....	55,355	58,480
Bloomington Bank.....	71,400	74,800
Cambridge City Bank.....	50,590	55,012
Canal Bank.....	46,000	50,000
Crescent City Bank.....	45,781	51,618
Exchange Bank.....	47,421	60,000
Farmers' Bank, Westfield.....	56,568	59,959
Indiana Bank.....	87,524	91,795
Indiana Farmers' Bank.....	45,810	50,000
Kentucky Stock Bank.....	83,990	90,738
La Grange Bank.....	56,889	59,436
Parke County Bank.....	76,152	83,530
Prairie City Bank.....	68,055	74,356
Salem Bank, Goshen.....	47,914	50,000
Southern Bank of Indiana.....	91,778	95,469
Total circulation and securities.....	\$1,255,942	\$1,368,941

STATEMENT OF CIRCULATION AND VALUE OF SECURITIES OF FREE BANKS THAT ARE WINDING UP AND RETIRING THEIR CIRCULATION.

	Circulation.	Value of Securities.	Where Redeemed.
Central Bank.....	\$14,278	\$15,830	Branch B'king Co. and Fletcher's B'k.
Brookville Bank....	15,867	17,430	At the Bank.
Bank of the Capitol..	2,745	2,700	Auditor's Office.
Bank of Elkhart.....	25,498	27,390	At the Bank.
Hoosier Bank.....	7,104	7,020	" " "
Indiana Stock Bank	15,000	16,600	" " "
Huntington Co. B'k	3,315	4,150	" " "
Indiana Reserve B'k	7,761	8,200	Fletcher's Bank.
Bank of Monticello..	1,490	1,650	Branch Bank of Lafayette.
Fayette Co. Bank....	3,000	3,000	Branch Bank of Connersville.
Merch's & Mech. B'k	4,951	5,040	Branch Bank New Albany.
Bank of Syracuse....	17,456	17,000	Bank of Goshen.

Total circulation and securities.....\$118,465 \$126,020

NOTE—The circulation of Tippecanoe Bank is \$47,040, and hcr securities are worth \$48,305. Protests on three thousand dollars of her notes were filed on the first day of October, and if not taken up in a few days, notice will be given for sale of her securities.

The Bank of Warsaw has a circulation of \$2,237, which is redeemed at the Bank.

The auditor recommends that the notes of these banks be received for State dues and taxes. This course would speedily restore the issues of these banks to public confidence.

The bankers in Cincinnati have been receiving the issues of all banks that were at par in New York, Baltimore and Philadelphia, and also of all solvent banks in Missouri, Kentucky, Louisiana and Indiana.

In New York matters have assumed a more cheerful aspect. On the 17th the associated banks of New York resolved to open no new accounts, with an agreement to redeem at par the Notes of Banks out of the State, until the resumption of specie payments.

In Boston on the 14th the banks associated in the Clearing House, resolved to accept currency to a limited amount on the daily settlements in lieu of coin as heretofore paid.

Stocks in New York show a slightly upward tendency. This will fluctuate a good deal before we look for any permanent change.

## SALES AT THE NEW YORK STOCK BOARD—OCT. 17.

\$4,000 N. Y. State 6's, '60.....	97
18,000 N. Y. State 5½'s, '60.....	95
2,000 Ohio State 6's, '86.....	84
1,000 Tenn. State 6's, '90.....	69
1,000 Virginia 6's.....	83
1,000 California State 7's, 1870.....	60
4,500 N. Y. Central 6's.....	76
1,000 Erie R. R. 3d Mortgage Bonds '83.....	50
5,000 Illinois Central R. R. Bonds b3.....	60
200 shares New York Central.....	65½
91 " LaCrosse & Milwaukee.....	7
50 " Del. & H. C. Company.....	97
100 " Penn. Coal Co.....	62½
50 " Cumberland Coal Co.....	61
265 " Erie R. R.....	11½
190 " Harlem R. R. stock.....	7½
100 " Reading.....	34
37 " Panama.....	71
20 " Illinois Central.....	78
100 " Cleve. & Pittsburg.....	13½
10 " Cleve. Col. & Cin.....	82
130 " Galena & Chicago.....	67½
100 " Cleveland & Toledo.....	27½
100 " Chicago & Rock Island.....	68½

THE CONDITION OF THE LOUISIANA TREASURY.—The Baton Rouge Advocate has been furnished with the following statement from the Auditor's Office:

Receipts in State Treasury, from all sources, from 1st January to 30th September, 1857, inclusive, which have been.....\$1,523,587 10  
The expenditures during the same period.....1,474,018 34

Leaving an excess of receipts over expenditures of.....\$ 49,568 76  
Add balance on hand 1st Jan., 1857.....702,414 71

Total amount in the State Treasury this day.....\$951,983 47

## DIVIDED AS FOLLOWS:

General Funds.....	\$ 47,202 67
Current School Fund.....	21,633 42
Internal Improvement Fund.....	4,849 40
Internal Improvement Tax.....	95,350 35
Road and Levee Fund.....	34,234 48
Levee and Drainage Fund.....	718,508 19
Free School Fund.....	17,740 28
Free School Accumulating Fund.....	11,599 63
Redemption of State Debt Fund.....	841 04
Seminary Fund.....	223 26
	\$951,983 47

RAILROAD RECEIPTS.—The Fond du Lac Journal gives the following as the receipts of the Chicago, St. Paul & Fond du Lac R. R., Northern Division, for September: Passengers.....\$4,446 34  
Freight.....6,841 05  
Express, Mail and Miscellaneous.....832 54

Total.....\$12,119 93

SUSPENDED RAILROAD AND OTHER COMPANIES.—The following named companies have failed to meet their obligations at maturity; some of them have gone to protest on their floating debts, and others have made assignment:

Delaware, Lackawanna & Western R. R. Co., protested in September.  
North Pennsylvania R. R. Co., suspended on floating debt.  
Philadelphia & Reading R. R. Co., protested Oct. 2.  
Cumberland Coal Co., protested Oct. 3.  
Long Dock (Jersey City) Co., protested Oct. 3.  
LaCrosse & Milwaukee R. R. Co., Sheriff in N. Y. city seized books and papers Oct. 3.  
Illinois Central R. R. Co., protested Oct. 10.  
New York & Erie R. R. Co., protested Oct. 10.  
Muscatine & Oskaloosa R. R. Co., suspended.  
Michigan Central R. R. Co., protested Oct. 10.  
Huntingdon & Broad Top Co., suspended.  
Steubenville & Indiana R. R. Co., suspended.  
Union Canal Co., suspended.

THE CROPS OF 1858.—The Chicago Free Press says:

"From personal observation during the last four weeks, in this State and Iowa, as well as from repeated conversations with farmers, we are satisfied that there is more winter wheat sown the present autumn than during any previous year in the history of the West. In most instances, however, we have found that the seed drill has been used, and great care taken in plowing and rolling.

Along the line of the Chicago, Alton and St. Louis, and Chicago and Rock Island Railroads, we observed some large fields pretty well advanced. In Iowa we also observed a large breadth in the ground.

## ALLEN &amp; NOYES' METALLIC PACKING.

## To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. j;23-1m

T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan 8 ly 119 Walnut st., Odd Fellows' Building.

## To Railroad Contractors.

ENGINEER'S OFFICE, ILLINOIS SOUTHERN R. R.,  
Vincennes, Ind., Aug. 24, 1857.

Proposals will be received at this office until the 15th day of October next for the grading, masonry and bridging of thirty miles of this road, commencing at Grayville, on the Great Wabash River, in White county and running south to the Saline county line.

The line runs through an elevated, healthy, and well settled country, having pure water and a salubrious climate.

The greatest abundance of supplies of every kind can be obtained at fair prices immediately along the line.

This work is well worthy the attention of experienced contractors.

Proposals will be received for the local work by sections of one mile each; or for the building of the whole thirty miles (including sidings, &c.), ready for the superstructure.

Plans, profiles and specifications may be seen, after the 10th of October, at the Engineer's Office in Grayville; or any necessary information may be obtained by addressing me at this place previous to that time.

Proposals must be addressed to  
aug27 CYRUS JENNINGS, Chief Engineer.

## Travelers! Tourists!! Railroad Men!!!

## DINSMORE'S COMPLETE AMERICAN

## Railroad and Steam Navigation GUIDE AND ROUTE BOOK.

Edited by RICHARD S. FISHER, Statistical Editor of Colton's Atlas of the World, &c.

288 PAGES, PRICE 25 CENTS.

## CONTENTS:

EDITOR'S NOTE BOOK.—A monthly Record of Material Progress.  
INDEX to the 28,000 miles of Railroads now in operation.  
INDEX to 1,500 Routes—Giving page of Railroads or Steamers comprising such; making a list of 10,000 Cities and Villages.  
OFFICIAL TIME TABLE—Giving starting time from all the Stations—Distances—Fares—&c., with copious notes of reference—showing the connections with other Roads and Stages with towns in the Interior, also Steamboat connections.  
COMBINED RAILROAD ROUTES.—A new feature never before published—gives principal Stations—Routes over which you go—with distances and page in book.  
STEAM NAVIGATION GUIDE—Alphabetically arranged, giving 600 Routes with names of Steamers—time of starting—where from—where to—Fares, &c.  
RAILROAD GAZETTEER—With general information of interest to Tourists.  
MAPS OF RAILROAD CENTERS—Showing at a glance how Railroads diverge—giving page of Table in Guide. The whole work accompanied by a large acrographic  
RAILROAD MAP, COMPILED FROM OFFICIAL SOURCES.

DINSMORE & CO.,  
Publishers, No. 9 Spruce St., N. Y.



**WAREHOUSE**

No. 5 FRONT STREET,  
Opposite Public Landing,  
Cincinnati, O.

**PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."**

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

**MCDANEL & HORNER,****LOCOMOTIVE AND CAR SPRING MANUFACTURERS, WILMINGTON, DEL.**

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

MCDANEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

**References.**

NORRIS BROTHER'S, Locomotive Builders, Philad.  
A. C. GRAY, Prest. New Castle Manuf. Co.  
U. WELLS, R. R. Car Manuf. Petersburg, Va.  
I. R. TRIMBLE, Supt. Philad. R.R. Co.  
May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga  
EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga  
THOMAS DOUGHERTY, Master Mach. do.  
THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va

**ALBERT M. LEA,  
CIVIL ENGINEER,  
KNOXVILLE, TENN.****New Works on Civil Engineering.**

THE Field Practice of Laying out Circular Curve for Railroads. By John C. Trautwine, Civil Engineer.—4th Thousand, in pocket-book form with tucks.

—ALSO—

A New Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Tables and 10 Engraved Plates of Diagrams. By John C. Trautwine, C. E.; 2d edition.

Price, one dollar each. Postage on the Curves, five cents; on the Excavations and Embankments, eight cents. For sale by WILLIAM HAMILTON.

Hall of the Franklin Institute,  
Philadelphia, Pa.

Sept. 21-3\*

**HOYT'S WATER GAUGE**

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by  
CHARLES W. COPELAND, Gen. Agent,  
Jy30 No. 66 Broadway, N. Y.

**RAILROAD IRON.**

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

feb19-1m

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

**BUSH & LOBDELL,  
Wilmington - - - - - Delaware.**

MANUFACTURERS OF  
CHILLED WHEELS

AND

**TIRES,  
For R. R. Cars & Locomotive Engines,**

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,  
EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.  
In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Harlan & Hollingsworth,  
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

**Union Works, Baltimore.****POOLE & HUNT,**

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

apc

**ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,**

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati.

**J. T. CRAPSEY,  
ATTORNEY AT LAW,**

OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

**SCHENECTADY  
Locomotive Works,**

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

**LOCOMOTIVE ENGINES,**

AND TENDERS, AND

**RAILROAD MACHINERY**

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Aul6.1y



GENERAL

## RAILWAY SUPPLY AGENCY.

SNOOK &amp; HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

JOHN W. KELLY,  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES &amp; CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE &amp; TRIP HAMMER,

JUDSON'S GOVERNOR VALVE.

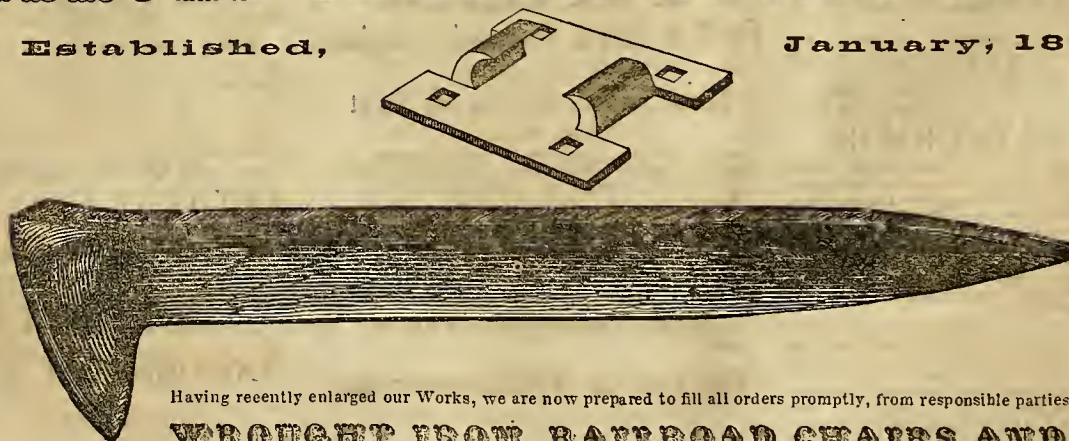
Orders solicited and promptly filled.

CINCINNATI WROUGHT-IRON

## RAILROAD CHAIR &amp; SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

## WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an Improved Method. The great superiority of our Chairs over all other (things called chairs) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Loller Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.17

Works and Office, North side Congress St., East of Canal Bridge.

J. B. GREEN &amp; BRO., Proprietors.

W. G. HYNDMAN'S



## Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

THOMAS D. STETSON,

Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FRIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:10 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

July 10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Settling Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

July 5

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI

AND COLUMBUS AND XENIA

## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus. One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 7

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

Freight.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

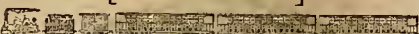
Office No. 2 Burnet House.

1856.

Summer Arrangement. 1857.

Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPORT,  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST EAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

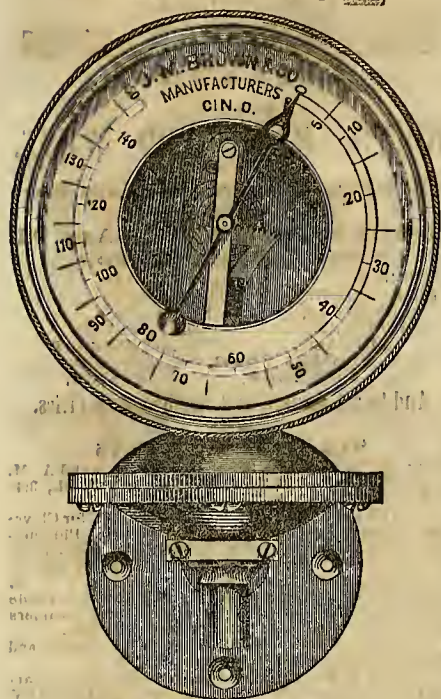
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no Railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



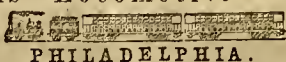
## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES  
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## Norris' Locomotive Works.



ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.  
**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy. 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,  
Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length, as required.  
**WROUGHT IRON WELDED TUBES.**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA.

**RAILROAD IRON.  
LOCOMOTIVES.**  
4,000 Tons rails, 58 to 61 lbs. per yard 200 tons  
rails 49 lbs. per yard. 1,000 tons rails 55 lbs.  
per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by  
J. H. GOODMAN & CO.,  
Feb 7, '56-2m.1 no. 7 Wall st., N.

## RAILROAD CAR

AND  
**COACH TRIMMINGS.**  
**DOREMUS & NIXON**  
No 21 Park Place, and 18 Murray st.,  
NEW YORK,  
**IMPORTERS**  
OF

**Plain and Figured Mohair Plush**  
Printed & Unrent do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**  
**Emameled Cloth, for seats & backs of Cars**

**ROPE MATTING, Every Width.**  
Oil Cloths for Head Linings, Enameled with Gold and Silver;

**DUCK CANVASS FOR CAR ROOFS;**  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

**PATENT FELT.**  
**FOR CUSHION & MATTRESS FILLING**  
N. B. We have the Plush in bond for exportation  
sep18 DOREMUS & NIXON

**W. G. ATKINSON,**  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.

**RAILROAD** routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists  
Mines explored, new Works laid off, and Geological maps prepared.  
mar 1 v

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

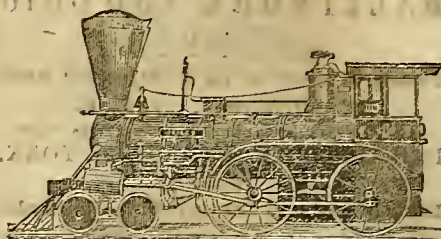
The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

Aug 14-1y

P. DUDLEY,  
President of the Board.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap. 20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,  
64 Courtlandt Street, New York.  
Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,  
**LOCOMOTIVE ENGINE LANTERNS**

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**  
Plush and Curled Hair.

Hand Cars and Baggage Barrows, Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes.  
Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.  
Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,  
Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

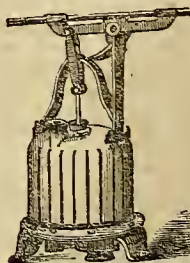
ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
feb. 6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND  
**Compound Steam Pumping Engine,**



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

PRIZE MEAL. (The highest prize) awarded to George J. McGowan's Pumping Engine at the late Fair, Ohio Mechanics' Institute. June 18, 1855



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....OCTOBER 29, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 36.

#### EDITORIAL.

The Monied Revolution.....	565
Brevities.....	565

#### RAILROADS.

Allentown R. R.....	566
Lebanon Valley R. R.....	566
New York & Erie R. R.....	566
Lexington & Big Sandy.....	566
Baltimore & Ohio R. R.....	566
Chicago, St. Paul & Fond du Lac R. R.....	566
Toledo, Wabash & Western R. R.....	571

#### MISCELLANEOUS.

Railroad Suspension.....	566
Railroad Investments.....	566
Overland Mail Route to California.....	568
Our Railroads and their Uses.....	571

#### MONEY AND STOCKS.

Sales at the New York Stock Board.....	572
Monetary and Commercial.....	572

☞ We call the attention of our readers to the advertisement of D. M. Carhart's Turn Tables, in another column. These Tables have been pronounced by many railroad men as superior to any other now in use.

☞ According to the State census of Georgia, the negroes of that State are valued at eighty-seven millions more than the land.

☞ The Governor has appointed Hon. Wm. M. Wilson, of Darke county, Judge of the first subdivision of the Second Judicial District, in place of Judge Clark, of Butler county, resigned.

☞ R. Babinet, the astronomer, has announced to the Institute of Paris that, in consequence of a favorable change in the currents of the ocean, a series of years of heat has been entered on.

### THE MONIED REVOLUTION.

That this country, and not merely this country, but Europe, is in a monied revolution, no one need be told. The term revolution is the only one which strictly describes the fact. It is a revolution of credit and of cash, till both reach the respective depositories where they must finally balance; or, if they do not balance, the errors of the account (the amount left for which there is no coin) must be expunged—blotted out. The books must be opened at a new place. This is a mathematical result—a natural result—just as necessary and as entirely inevitable as that of a planet revolving in its orbit, and returning to its place. All our credits, our bank notes, our promissory notes, our current debts, represent a legal tender of that amount, which only can be made in coin by law; or it represents something in property which, at a cash sale, will produce that amount of coin. Hence, it is mathematically certain that, however many exchanges may be made, however wide a credit accepted, there must ultimately, in settling balances, be a time when the coin or cash property must meet these notes and credits. If these credits go on for a long time they come more and more to be based on a fictitious idea of values. We see that in every day's transactions. The difference between the fictitious and the real value is the error in the true balance. This error, as we sometimes find in a merchant's ledger, may run on for a long time undetected, and it frequently grows larger; but, as in natural sequences—so here—the error will be detected in the end. By some such process it is that society accumulates fictitious values, but ultimately begins to suspect its error, and corrects it. The fear that there is such an error makes what is called a panic. Very likely it is a panic, but no such panic exists without a cause. When, as we have recently witnessed, mercantile firms fail with an outstanding debt of one or two millions, can any doubt there is cause for failure?

These causes of a panic may be very much exaggerated, and we trust they are. All that is solid in wealth or production exists to an unprecedented degree in this country. It is greater this year than usual. Not only this, but there is more of coin, more of solid values, exchangeable in the markets of the world, than this country ever had. This we have proved in the RECORD, and we, like others, have placed too much reliance on it, as evidence of an ability to stand through any convulsion. But, in looking only to solid wealth, we have looked too much on one side. Whatever be the wealth of a country, if it has an extended system of credits, the final balance must be struck between those credits, and the estimated values on which they are based. If these credits are too large for the cash values, there is an error in the form of debt which must be settled or expunged. The

question, then, is not with property, but with debts. If A and B cannot pay their debts in the estimated values of property on which those credits are based, it will be in vain that X, Y and Z are very rich. A and B must go into liquidation, and their debts be sponged out. The process must be passed through, and it must end in that way.

Now, the expression to the public eye which indicates this settlement of balances between any two nations, or between any two cities, or between a bank and the holders of its notes, is the movement of coin. It is the exact index of commercial balances.

To illustrate the last point, and also the present condition of things, we will refer to the movement of specie between this country and Europe for nearly forty years. This movement followed strictly the balances of trade between Europe and America:

From 1821 to 1825, inclusive, the balance of Exports in coin was.....	\$ 12,335,000
From 1832 to 1835, inclusive, balance of Imports.....	55,000,000
From 1839 to 1842, inclusive, balance of Exports.....	8,500,000
From 1843 to 1847, inclusive, balance of Imports.....	38,800,000
From 1848 to 1856, inclusive, balance of Exports was.....	194,000,000

Balance of the EXPORTS OF GOLD from this country in thirty-six years was ONE HUNDRED AND FORTY MILLIONS!

On this state of facts we ask the reader's attention to some obvious inferences:

First, whether it be considered as cause or effect, it is palpable, and beyond doubt, that this movement of coin has invariably followed the course of trade, and indicated the precise commercial balances. For example, in 1821, '22 and '23, we exported coin to pay, as far as possible, the debts which could no longer be replaced by credit, in the commercial revulsion of 1819-'20.

From 1832 to 1838 we imported specie; for then we were moving on a sound basis, and trading within our means. But again, from 1839 to 1842, we exported specie, just as we did in 1821, to fill, as far as practicable, the vacuum created by the commercial revulsion of 1837-'39.

From 1849 to the present moment we have exported specie to an enormous extent. This has not (for the first time) followed a commercial revulsion, but has preceded it. But the fact still remains that this gold export has indicated precisely the commercial balances—the mathematical vacuum created by the want of other values, and must be filled by gold, or not at all.

In the results of thirty-six years, then, we failed to meet the balances of trade by not less than one hundred and forty millions of dollars!

The answer to this palpable fact, given by the school of political Free Traders, is that gold is like potatoes, dug out of the earth. Grant it; but is gold like potatoes in every function it performs? Is it perishable? Is it a legal tender? Is it the same thing to



export potatoes or gold? Let our readers ask themselves this question, and reflect upon it: Is it the same thing to export gold or corn?

**ALLENTOWN RAILROAD.**—The work on this route has been stopped in consequence of the suspension of Choteau, Sandford & Co.

**LEBANON VALLEY RAILROAD, PENNSYLVANIA.**—This company has suspended operations for the present.

**NEW YORK AND ERIE RAILROAD.**—The difficulties of this company has thoroughly aroused the New Yorkers. At a meeting held on Thursday, \$400,000 were subscribed.—Several gentlemen offered their services to solicit subscriptions, and the ladies have offered their services to canvass the city.—This last resort looks like a final struggle. We dislike to say ought against a fallen company. And the Erie Company is now down, but we must add that we have but little sympathy for a course of management which from the very outset, looked towards the inauguration of the very difficulties that have overtaken the road.

**LEXINGTON AND BIG SANDY RAILROAD.**—We are indebted to the officers of this company for a copy of their late annual report. We shall endeavor to give an extended notice in our next.

**BALTIMORE AND OHIO RAILROAD.**—This company has issued its annual report for the last fiscal year. The operations of the year, after paying interest and discounts, show a clear gain of \$1,207,717 64. A dividend of three per cent. was declared in October last, and another of same amount in April.

**CHICAGO, ST. PAUL AND FOND DU LAC RAILROAD.**—The statement which we copied in the PRESS of Saturday in relation to the failure and assignment of the Chicago, St. Paul and Fond du Lac Railroad Company, was entirely without foundation. Moses Taylor and Co., to whom the assignment was said to have been made, says in a card, published in the *Tribune* of Friday, their firm "have no interest or connection in said road."

We are also glad to be able to state in this connection, that work upon the Chicago, St. Paul and Fond du Lac Railroad is being vigorously pushed forward, and that all current indebtedness is being promptly met as it becomes due. The floating liabilities of the Company in the West do not much exceed \$90,000.

**RAILROAD SUSPENSION.**—The Knoxville Register says:

We understand that yesterday, by a vote of the Directory it was resolved to make a total suspension of all kinds on the Knoxville and Kentucky Railroad. We have only time to announce the fact without comment. We deeply regret that such a step has been deemed necessary. We think the suspension will only be temporary. The company have an ample supply of county bonds, but so stringent has been the money market that it was found impossible to negotiate them, except at most ruinous rates.

## Railroads.

### RAILROAD INVESTMENTS—HOW TO MAKE THEM LESS UNPROFITABLE.

By CHARLES ELLET, JR., Civil Engineer.

WASHINGTON, Oct. 15, 1857.

To the Editors of the *Nat. Intelligencer*:

GENTLEMEN,—It must be admitted that the railroad, in the present state of society, is a necessary machine, as indispensable as the steam engine which drives a boat or a mill, as the cart which brings us our coal, or the furnace which converts our ore into metal. A piece of machinery which has become absolutely necessary to populous and wealthy communities, if judiciously directed, ought certainly to pay reasonable profits to its proprietors. People will pay for the things they must have.

It is not, clearly, for want of adequate business that the great American railroads are so unprofitable. There are numerous lines in this country of which the stocks are almost valueless as marketable commodities, yet on which the business is so great that, when exhibited in an appreciable shape, it staggers credulity.

Let us take, for example, one of the great railroads of New York, with the history and present condition of which we are all familiar—a road which annually transports *more than a million of passengers and over three-quarters of a million of tons of freight*—a road of which the stock is now selling at prices ranging from eight to twelve cents in the dollar.

Did it ever occur to you, Messrs. Editors, to try to imagine what three-fourths of a million of tons really is, by reducing that quantity to some other form with which the mind and the eye are more familiar? For this purpose, let us suppose the three-fourths of a million of tons to be represented by flour in barrels.

The gross annual traffic of this road in freight is about equivalent to eight millions of barrels of flour. But still we are at a loss to appreciate the quantity. A million is too large a number for the mind to estimate.

Eight millions of barrels of flour, then, piled up with the head of one barrel upon the head of the other, will form a column long enough to reach from the center of Wall street to the center of this earth. Laid side by side in a row, eight millions of barrels would extend from New York to London.

The transportation of the whole of this immense mass, with the cars which contain it, a distance of about two hundred miles, is a part of the annual task of a single railroad.

But this same road carries also considerably more than a million of passengers per annum. A million of persons placed as near together as soldiers drawn up in order of battle, and occupying each two feet in file, will extend over a space of about four hundred miles. The mere passenger business of this great work is equal to the conveyance of the entire populations of Washington and Georgetown over a road one hundred miles long twelve times a year.

Now, to appreciate the force practically required to move these vast quantities of men and things, imagine a column of *thirty thousand locomotive engines*, each making a single trip of one hundred miles.

The stock of the company which "enjoys" this immense trade, to the great astonishment of the public, is worth very little. To a per-

son competent to study its tariff of toll, and to compare the charges levied with the necessary expenses of the work to be done, the only matter of legitimate surprise is that the stock, under the actual charges, can be supposed to be worth anything at all.

Yet, intrinsically, the New York and Erie railroad is a most valuable improvement, which only does not pay because its managers, unskilled in the arrangement of a tariff of toll, have never permitted it to pay. It is like a noble ship driven, bow on, upon the visible breakers. No railroad can possibly have command of a trade so great, or possess a monopoly so complete, that it will not be in the power of its managers to reduce it to bankruptcy by adopting an improperly arranged and inadequate tariff.

Permit me to say that I am broaching here no new doctrine, recently conceived, and now for the first time uttered. An *Essay on the Laws of Trade*, written nearly twenty years ago; professional communications to the railroad journals from time to time, and every company with which I have been connected, will bear witness to the fact that I, for one, have never failed to raise a warning voice against the prevailing but popular sentiment in favor of the low and ruinous tariffs which have been fastened, by indiscretion, or negligence, or reckless competition, upon nearly all the railroads of this country.

Let us take another illustration: There is a railroad in Pennsylvania which usually transports nearly every two weeks a mass of coal sufficient to fill up the whole breadth of Wall street, from Broadway down to East river, and from the pavement up to the eaves of the five-story buildings which line its foot-walks. Or, to illustrate the magnitude of the business of this road by a comparison with things more familiar to yourselves, Messrs. Editors, let me say that it transports coal enough every six months to fill up the whole of Pennsylvania avenue to a depth of forty feet, from the base of the Capitol to the President's mansion, with vast quantities of merchandise and a heavy travel in addition. The stock of this road is selling for about *one-sixth or one-seventh* of its par value apparently borne down by the magnitude of its trade.

The true cause of the great depreciation of this stock also is simply an inadequate tariff. Fourteen years ago, when this company—the Reading Railroad Company—declared its purpose to carry coal at a very low figure, I was engaged in the investigation of the cost of railroad transportation, and publishing the results of my inquiries in this country and Europe. In the course of those publications I announced, as the inevitable consequence of the policy which that company had adopted, that they must look forward to the necessity of adding a million of dollars per annum to their investment to meet the losses which their tariff would, directly or indirectly, entail. Fourteen years have nearly passed by since that period, and the company's investment has swollen from year to year, with singular uniformity, at the rate of one million of dollars a year ever since. The only possible means of arresting the evil and stopping the growth of their aggregate indebtedness is now, as it was fourteen years ago, to increase the charge for transportation, and close their construction account.

Bear with me, gentlemen, while I offer another illustration on a larger scale.

There are four great companies engaged in the transportation of the anthracite coal of



Pennsylvania from the mines to the seaboard. The works of these companies, with their out-fits, have cost about fifty millions of dollars. They carry now, in the aggregate, of coal and other things, on the four lines, about six millions of tons per annum—a mass sufficient to form a pile forty feet wide, forty feet high, and thirty miles long. This coal sells in the markets along the coast at the average price of six or seven dollars a ton.

But, if it were not for these four railroads and canals, anthracite coal either would not be used at all at a distance from the mines, or if used, could only be bought for about \$20 a ton.

Now, the transporters of all this coal and freight receive but about \$1.50 a ton as remuneration for the labor and capital by which they save the public \$14 or \$15 a ton on nearly all the coal consumed by a population of ten millions of people.

If, instead of \$1.50 a ton, these transporters received \$2 a ton, or only 50 cts. a ton more than they now charge, their aggregate income would be increased \$3,000,000, or six per ct. upon their entire capital of \$50,000,000.

Yet these four companies, holding an almost absolute monopoly of the anthracite trade, move on steadily and collectively, year after year, each overburdened with trade, each possessing more business than it knows how to manage, each jealous of the other's prosperity, and seeking to destroy it, and so adjusting their charges as to render their own and each other's prosperity reciprocally impossible.

I would not trouble you, Messrs. Editors, with these facts and comments if I did not think it possible to suggest an adequate remedy for a great evil, under which thousands of people are this day suffering severe distress. *The great error and the cause of this vast depreciation of property is referable to the tariffs of toll.* Until these are made what they ought to be, or something approaching what they ought to be, our railroads can not prosper. No financial ability, exercised in negotiating loans for temporary relief, no economy of administration can supersede the imperative necessity of a well devised toll-sheet. It is from the tolls, and *nothing else*, that the revenues are to be extracted.

I will venture, therefore, to submit, as briefly as possible, some suggestions for the formation of railroad tariffs, where revenue, and not mere popularity, is the object sought by the company.

I. *Let each company make its own tariff of toll, based on a direct and careful investigation of the conditions of its own trade, instead of adopting the tariffs or classifications of other companies, or even using them as guides.*

By copying the toll-sheets of established lines, they necessarily copy the errors of those lines. And, as a rule, the older a company is, the longer it has been exposed to the potent pressure of those outside influences which, by little and little, cut away the profits of a road under the plea of encouraging trade, until few officers can be found to exhibit the moral courage necessary to face the storm of indignation which usually follows an attempt at reformation.

Besides, the toll-sheets of many old lines are for the most part copied from those that are older, with frequent special concessions to vigorous appeals in favor of particular interests.

II. *In arranging the tariff, let the first step be to ascertain the true cost of transportation upon the particular road for which the tariff is intended.*

The actual cost of transportation is clearly the minimum limit of admissible reductions in favor of those objects of transportation which are deemed, from motives of policy, most worthy of special encouragement.

There may be, and ought to be, material discriminations in every tariff. But no article ought to be conveyed for less than the actual cost of its transportation, fairly made out from the proper experience of the line.

It is not to be assumed that, however apparent the propriety of this maxim may appear, it is generally respected. In fact there are, comparatively, but few railroad companies that know what is the actual cost of transportation upon their road. Few companies so keep their accounts that they would be able to approximate towards a correct estimate of that indispensable element in the preparation of a tariff.

This datum cannot be supplied by a resort to the experience of other companies whose accounts profess to show the cost of transportation; for the actual cost of carrying freight on one line is not unfrequently *three times*, and is occasionally *four times* as great as it is on another.

There is, in fact, no reliable means of determining the cost of transportation—and hence the lowest admissible charge for freight—but by direct and systematic deductions from the experience of the road itself for which the tariff is intended. The accounts of the road must be so kept as to separate the cost due to the freight, item by item, from that due to the passenger business of the line.

But the cost of transportation is not a fixed quantity even on the same road. It varies from year to year; and, therefore, while the conditions of the line are changing frequently, we must use the results derived from the experience of each year to correct the tariff of the succeeding year.

Having determined the true cost of transportation, and adopted that as a minimum charge, below which the toll on no article shall be suffered to fall, the company will be secured against one frequent source of immense extravagance—that of carrying freight *for nothing, or less than nothing.*

With this information in hand, it is practicable to construct a *tariff of expenses*, which should, in every case, precede the adoption of a tariff of charges.

III. *The next step in the process should be to ascertain the highest charge which each article will bear, or its equivalent, the least charge which will prohibit its transportation on the road.*

By the prohibitory charge I mean the least toll which would be found sufficient to drive the commodity altogether to some rival work, or compel a resort for its supply altogether to some rival market.

This prohibitory charge fixes another limit for each article and each position, which it is apparent must never be transcended, nor even approached, in the adjustment of the tariff.

To find this prohibitory charge, even approximately, in anticipation of the opening of the road, involves many doubtful quantities and much careful investigation. But on a road which has been several years in active use, under an established tariff, it presents no difficulty whatever, even though that tariff may have been established, as most tariffs are, by very random guesses. On such a road there are simple processes which it is unnecessary now to discuss, which will always enable the constructor of the tariff to ascertain with great precision, from the facts resulting from the toll actually charged, just what toll

would, on any commodity, be equivalent to its prohibition from the line.

Having employed these materials, we should next construct a *tariff of prohibitory charges.*

IV. *The true charge for each article and each position, it must be apparent, will be found somewhere between the actual cost of transportation and the prohibitory charge.*

In fact, it can be demonstrated that if we add together, for each article and each position, the actual cost of transportation and the prohibitory charge, and take the arithmetical mean between the two, we shall have, in most cases, very nearly that charge which will yield the maximum net revenue.

In addition, we may know—for it can be demonstrated—that the proper and most judicious charge can never be above, but must always be somewhat below, the arithmetical mean thus obtained.

V. The next step in the construction of a toll-sheet should be to form a third tariff, by adding together, for each article and each position, the cost of transportation and the prohibitory charge, and taking half their sum as a near approximation to that charge which will yield the greatest net revenue.

A company proceeding in this way—first, constructing a tariff of expenses; then the tariff of prohibitory charges; and, thirdly, an average tariff, representing the charges which, if applied, would yield the maximum net revenue—would have obtained the basis of an advantageous tariff, and a safe test of the charges which they would propose to adopt.

The work, thus far, should be performed by a competent engineer, or other officer properly qualified, as the solution of a purely scientific problem. This party should have no discretionary power. His province should be simply and exclusively to construct a tariff, by this process, which will produce the greatest possible net revenue. He should keep a clear journal of the steps by which he arrived at the cost of transportation, and by which he determined the prohibitory charges for each article and position.

VI. The duty of the Board of Directors to the stockholders and to the public is next to be discharged.

There are questions of policy beyond the mere measurement of the present maximum net revenue, which may properly exercise some influence upon the course of a company in the establishment of its tariff. There are often admissible discriminations to be made. There are sometimes present sacrifices which may be incurred with a view to prospective advantages. But, whatever may be the practice, these are not questions for the executive or subordinate officers of the company to decide. The responsibility is too serious. The consequences of an abuse or a loose exercise of so great a power are too momentous. It is for the Board of Directors alone to determine when, where, and to what extent to permit these special concessions in favor of peculiar interests, or with a view to prospective gains. But the Directors cannot perform their duty in this respect safely, and with a knowledge of what they are really doing, unless they have a preliminary tariff, showing the charges which will yield the maximum net revenue for each article and each position before them. The charges which they propose to adopt must be tested, item by item, by this preliminary scale.

VII. The tariff which has thus been framed and reported to the Board for their general guidance must be accompanied with estimates



for each article and position, of the *quantities of freight* which will be furnished under the charges which it is estimated will produce the maximum net revenue. This schedule of quantities will furnish the Board a safe guide to the consequences to the revenue of any concessions which they may propose to make in favor of special interests.

I know that this will be regarded as a laborious method of doing that which is usually performed in a very quick and off-hand way. It will be objected that by this system the formation of a tariff is a work of great labor, and requires an intimate knowledge of the trade to be accommodated, the influence of rival works, and the effect of the charges upon the tonnage of the road; and that, to carry out the plan upon some lines, would require the entire time of an intelligent officer, who could really do little else than study the traffic and circumstances of the road and its tributaries and rivals, with their never-ceasing changes.

That is quite true. But, let me ask in reply, what subject can be presented to a Board of railroad Directors of greater importance or more worthy of labor and study than the preparation of its tariff of charges?

The expenses of the company are met, or ought to be met, by the revenues derived from its tariff. The interest due to the bondholders is obtained from the tariff. The dividends of the stockholders, if earned at all, must come from the tariff.

If the tariff is essentially wrong, charging less than the cost of conveying some commodities, and taxing others to the limit of prohibition, the company's full, equitable and legitimate success is impossible.

There are railroads in this country on which the freight annually transported is represented by more than *one hundred millions of tons* conveyed one mile, and on which an error of one cent per ton per mile in the tariff might be represented by nearly a million of dollars in the yearly results.

Yet one cent per ton per mile is not an uncommon error. On the contrary, greater errors than that are almost universal. It cannot be denied that the whole public, stockholders, customers, and directors, habitually look to the increasing monthly gross receipts as evidence of the increasing prosperity of their road; that they habitually confound the magnitude of a company's receipts with the magnitude of its profits.

Yet there is no fact better susceptible of the strictest mathematical demonstration than this—that *the charges which will yield the maximum net revenue on railroads doing a miscellaneous business must be from one to two cents per ton per mile greater than that which will produce the maximum gross revenue.* If, then, a company aims to obtain the greatest possible gross revenue, it can only succeed by a *great sacrifice of dividends.*

In fact, the gross receipts of a company may be enormous, and yet insufficient to pay the expenses of transportation.

The success of a railroad, after the work has been properly constructed and placed under a vigorous and economical administration, is still wholly dependent on its tariff of toll. Everything else may be right; but if the tariff is wrong the stockholders must suffer. And this tariff, which ought to be framed from the results of direct and continued observation and calculation, is usually the result of the guesses and partialities of the officers or the most active members of the Board; or, what is vastly worse, of external influ-

ences brought to bear on the Board, or of imitations of the tariffs of other roads which had been previously adjusted by the same exterior influences.

Now, it is not proposed to recommend a rigid adherence in every case to the tariff which has been adjusted with a single eye to the procurement of the maximum profits. What I advocate is the construction of such a tariff in the first instance as a necessary guide to the formation of the actual tariff.

The Board will be compelled to submit to some sacrifices. By having such a scale before them they will always have the means of measuring the value of the sacrifices which they propose to make. It will aid their judgment of the magnitude of these sacrifices to know that while a very small departure from the precise charge which would yield the greatest net revenue is always admissible, and small *deductions* from that charge, almost always advisable, material departures from it cannot be ventured upon without entailing great losses. It is a *law*, general and susceptible of demonstration, that deviations from the charges which will yield the greatest net profit will cause reductions of the net revenue proportional to the square of those deviations. Hence a variation of only one mill per ton per mile from the charge which corresponds with the greatest net profit might cause an exceedingly small diminution of the profit; while a deviation of one cent would increase the loss consequent on the deviation *one-hundred-fold*, or one hundred times as much as the deviation of only one mill would have caused.

*The injurious consequences due to over-charges are always greater than those due to under-charges.* A charge that is too high reduces both the *profits* and the *business* of the road, and is consequently adverse both to the interests of the company and those of the public.

But at the same time it is very certain that over-charges are much less likely to occur, or, occurring, to continue, than under-charges. Everybody is on the watch to protect the public interest. That side of the question is abundantly guarded by the strongest influence in this country—an irresistible public opinion.

But who is there to protect the stockholders' interests? The President? The President of a railroad company who can and who dares always to uphold that interest, and will not bend before a storm of public opinion, must be formed of the stuff that heroes used to be made of. Such men are the Curtiuses of this commercial age.

The method which I propose for the construction of the toll-sheet will have the effect of drawing the revenue from those articles which can best afford to yield it, and precisely in the proportion of their ability to contribute. The commodities which are near market will be taxed higher, while the same commodities, when drawn from more remote points, will be encouraged by lower charges. These results necessarily spring from the practical application of the system, which will be always a perfect protection against the two greatest dangers—working for less than cost and overtaxing the distant trade.

I do not, of course, contend that a tariff constructed as I propose is a general panacea for all the financial ills of the railroad system. It cannot make a road which has cost too much for the business to be done upon it always remunerative to the capital expended. But, under an administration in other respects judicious, it will draw from every road the best results that the line is capable of affording. If the road is economically managed, and there

are the elements of profits in it, this system of charging toll will bring them out.

If a company cannot make dividends with the random tariff in use, the Directors may be able to find out, by constructing such a toll-sheet as I recommend, whether they cannot do better by another. It might result that they would find that their charges were generally too low. They would know that to increase them would be unpopular.

With the facts plainly made out by a competent officer, and printed and submitted for their reflection, they could decide which to choose—a popular tariff and no dividends, or an unpopular one and reasonable profits.

WASHINGTON, Oct. 15, 1857.

## OVERLAND MAIL ROUTE TO CALIFORNIA.

LETTER OF LIEUT. MOWRY, U. S. A.

I take great pleasure in communicating to you, in writing, the substance of the information, given in conversation to Messrs. Butterfield and Spencer, in relation to the new overland mail route to California, via El Paso and Fort Yuma, agreeably with your request.

Of the manifest advantages, in a purely practicable view, of this route over the more northern ones, it is unnecessary for me to speak here. The overwhelming testimony upon this point, upon which the Postmaster General based his decision, has been very ably presented, in an elaborate article, which appeared originally in the *Washington Star*, and which has been extensively copied. To that article, and my letter to the *N. Y. Times* of July 7th, I beg leave to refer the sceptical. It is sufficient to say here, that snow never lays upon this route—that it has been used by the Mexicans in their intercourse with California, for two hundred years—and that since 1847, the American emigration, to the number of several thousand a year, have annually passed over it, at all seasons, driving thousands of head of cattle and sheep. Fort Yuma, now the most important station in California, was formerly garrisoned by the Mexican forces, as a protection to the travel across the Colorado river.

I shall confine myself to that portion of the route between the Rio Grande and San Diego. Upon this, my information is full and reliable.

The distance from the Rio Grande to Fort Yuma is usually estimated at six hundred miles. It will probably fall a little short of this, upon actual measurement. The route to be followed by you, in fulfilling your contract, runs from the Rio Grande to the San Pedro river, 244 miles by Parke's measurement; thence down the San Pedro, to the Gila; thence down the Gila, to Fort Yuma; thence across the Colorado desert, to San Diego and Los Angeles. The usually traveled route of emigrant parties, and that pursued by the First Regiment of Dragoons, last year, continues on from the San Pedro to Tucson, on the Santa Cruz river, fifty miles; thence to the Pimos villages, on the Gila, across the jornada, (desert,) 90 miles, without water, in the dry season. By following the course of the San Pedro, until it strikes the Gila, and then continuing down the Gila, this 90 mile desert is avoided, and you have not only good grazing and plenty of water, but also facilities for permanent grazing and farming stations, which the old route does not afford. The desert referred to, between Tucson and the Pimos villages, on the Gila river, cannot long remain the great obstacle to travel that it now is. Major Emory concurs with me, in the



opinion that water can be found at no great depth, by sinking wells, and we know that the Santa Cruz river, which sinks near Tucson, must continue its course towards the Gila, as a subterranean stream.

From the Rio Grande to the San Pedro, 244 miles, there are thirteen permanent water stations. If we include the water holes, where a supply is found most of the year, there are eighteen; giving an average of about nineteen miles between permanent water, and including the water holes, of about thirteen miles. This, without a particle of labor or expense. The water holes, in almost every instance, can be made permanent by the construction of artificial tanks. These have long been used by the Mexicans, and can be built at small cost. At the Arizona Copper Mines, south of the Gila, tanks have been constructed which have proved entirely successful, and this too, in a very unfavorable locality. It is worthy of remark that water in great abundance, has been obtained at these mines, at the depth of seventy feet, by sinking an ordinary shaft. The principal watering places between the Rio Grande and the San Pedro, are the following:

Nedde Springs,	Vicinity of Fort Webster,
Cook's Springs,	Peloncillo, (Sugar Loaf Peak,) Tanks,
Rio Mimbres,	Valle-de-Sauz Cienega,
Aqua Fria,	Puerta del dabo,
Ojo de-la-Vaeca,	Croton Springs,
Penasquitas,	Pleya de los Pimos,
Ojo de Inez,	San Pedro river.

The Gila River to the north of the route, is but few miles distant, with its branches. On the branches there is plenty of grazing, where large permanent stations could be made. To the south of the Pleya de los Pimos, in the Calistra mountains, there is also good grazing, with plenty of water in springs. From an old map, in my possession, the original of which is in the governmental archives in the city of Mexico, drawn and dedicated to the king of Spain, in 1757, just one hundred years ago, I find laid down many settlements, mining and agricultural, of which to-day we have no trace, save scarcely visible ruins, as yet unexplored. The notes accompanying the map, also in my possession, speak of these settlements as being at springs and permanent streams at the foot of the mountains, and of their opulent produce of corn, wheat, grapes and other fruits. These settlements were not confined to the San Pedro and Santa Cruz valley, but extended on towards the Mimbres and the Rio Grande, dotting the whole face of the country. These facts induced me to believe that much water and many good agricultural regions exist, which have been naturally overlooked in an exploration having for its object, to determine as short and direct a line for a railroad, as the country affords.

Major Emory, in his report, speaks of many of these settlements on the line of his survey, and of their great wealth in cattle and horses. The Hon. John R. Bartlett, late U. S. Boundary Commissioner, informs me that he explored many points to the north and south of the proposed route, and found water and grass at the base of the mountains, which are as yet laid down on no map or itinerary. This information, thus confirmed, is of great value to you, as it affords you facilities for establishing your permanent grazing stations, near the route, in places where it is not practicable to make them directly upon it. The surveying party which you send out should by all means embrace every point, in its exploration, within reasonable and practicable distances of the line of the post route. Lt. Parke says, in his report, that "an abundance

of water, for railroad purposes, can be obtained and delivered along the line, by conduits, from Cook's Spring, Rio Mimbres, Ojo de-la-Vaca, Aqua Fria, Ojo de Inez, Cienega de Sauz, Croton Springs, and Bear Springs, Pleya de los Pimos, Antelope, Dove and Castro Springs; Bear Spring, at the head of the Arivapya, a branch of the San Pedro. The above localities are permanent watering places and have never been known to fail, notwithstanding the drains upon them by evaporation, large herds of stock en route for the Pacific coast, and the frequent visits of the wandering Apache." "The clouds are almost always hovering over the mountains, dispensing copious showers, furnishing abundant supplies for the springs and streams already enumerated. Between the Ojo de Inez and Cienega de Sauz there is every reason to believe there are two points in the Pyramid Basin where artesian wells can be sunk." As I have before stated, water can be found, almost invariably, by diverging slightly from the route.

The San Pedro valley will sustain a population of several thousand. A town will probably grow up here at the crossing, and another on the Gila, above the Pimos villages. It is worthy of note that Lt. Parke's party found gold at the crossing of the San Pedro.

Parke gives the distance from Fort Fillmore, on the Rio Grande to the Maricopa Wells, 19 miles below the Pimos villages, 345 miles, and divides this into—

Prairie.....	230 miles.
Rolling lands.....	65
Mountainous.....	50 "
	345

From this, you see your route is comparatively of slight difficulty to overcome. It must be borne in mind, that Congress has appropriated \$200,000 for the construction of a wagon road over this route, which materially relieves you from expenditures, and gives you only the stocking of your route, and establishment of stations, to place your contract in active operation. Much of this \$200,000 will undoubtedly be expended in increasing the quantity and permanence of water on the route. Lt. Parke also says: "From the form and geological structure of the basins and plains, it is probable that ordinary wells may be made to furnish abundant supplies of water for stations, and that, by providing these water stations and suitable relays, a post route can be established, over which the mail can be carried in less than thirty days." It is now your affair, gentlemen, to demonstrate the truth of these suggestions.

From the Pimos villages, down the Gila to Fort Yuma, there is no difficulty to be encountered. The route lays along the river occasionally diverging from it a few miles, and again returning. The Pimos Indians cultivate large crops of wheat, corn and cotton, and would to-day, were you ready to receive, supply you with a large quantity of grain and flour. Emigrants have, for years, built up their broken-down animals, with grain purchased from the Pimos.

Throughout the entire length of the route, at convenient distances, should it be deemed advisable, you can establish farms for the raising of grain for your stock, and supplies for your employees; should you prefer to purchase, the Sonora market will afford you any desired quantity of grain, flour, and beef, at low prices, and delivered at any desired point.

It would be necessary to have an acute, faithful agent, to purchase these supplies, one

thoroughly acquainted with the country and the Mexican character. If you can secure the services of Mr. P. R. Brady, who is an old resident of the Territory, thoroughly acquainted with the resources of Sonora, and with the Mexican people, he will be invaluable to you, in this capacity.

My own impression is, that enough grain will be raised in the Territory to answer all your purposes. The vicinity of the Mexican market, and your own abilities to cultivate, will check any tendency to an exorbitant price. There is, also, the great agricultural region north of the Gila, now being developed by Col. Bonneville, which incudes, he says, "the finest region of country he has ever seen; valleys capable of sustaining a population of 20,000 each, and teeming with the evidences of an ancient and superior civilization." It is worthy of remark that Prof. Kendrick, (now of the U. S. Military Academy, and late Commanding officer of Ft. Defiance, north of the Gila, in the Navajoe country,) and myself, agreed in the opinion, expressed previous to Col. Bonneville's exploration, that this country must be one of great agricultural value. In our conversation it was suggested by Mr. Butterfield, that you would take out frame houses, to be erected at the stations. This would be only useless expense, nor would they be adapted to the country or climate. Adobe buildings thatched, or better, with mud roofs, can be constructed at small cost. They will be more comfortable and durable, and will serve as a better defense against Indian depredations. Mexican labor to any amount can be obtained at small wages, probably not to exceed \$10 per month. Your animals will also be best, and more cheaply cared for, under Mexican, vaqueros—(herdsmen,) but they will need active and faithful American superintendence.

At the mouth of the Gila, and its junction with the Colorado River, the route crosses the latter stream and enters California. To this point, from the Rio Grande, it traverses the new Territory of Arizona throughout its entire length. Fort Yuma and Colorado City are at the junction of the two rivers. You can cross your stages here, by ferrying, but it is, in my opinion, both more profitable and judicious, to at once construct, a suspension bridge over the Colorado. At the point of junction of the Gila and Colorado, there are two high natural piers of solid rock. The river, here makes a sharp angle and narrows to about 300 feet in width.

Here the Railroad when constructed, must cross. The banks of the stream, for many miles above and below, are subject to change by each year's freshet.

Capt. Geo. A. Johnson, a gentleman of much intelligence and practical talent, for many years past the government contractor for the supply of Fort Yuma, by steamboat transportation, is of the opinion that a suspension bridge can be thrown across the Colorado, at the point indicated, for \$25,000. This estimate is much too low in my opinion, but estimating the cost at \$100,000, the great amount of crossing, and which is constantly on the increase, would make a bridge a very profitable investment. I am much under the actual figures in saying that upon \$100,000 capital, the tolls would pay 10 per cent. per annum, giving your own crossing of stages and freight free of cost. The number of sheep annually driven from New Mexico to California, would by the toll levied on them, pay more than 6 per cent. The ferry of Yaeger & Co., one mile below Fort Yuma, is very



valuable property. It yields annually, a handsome profit, and has at a cost of several thousand dollars, bought off all opposition. Mr. Yaeger, as well as other parties on the River, would undoubtedly take stock largely in the suspension Bridge, and you could have no better agent at Fort Yuma, than Mr Yaeger, if you can secure his services. He is an old resident, thoroughly acquainted with the country, an experienced stock raiser, and an honest man.

The owners of the Colorado City, opposite Fort Yuma, will undoubtedly join in any scheme to advance the interests of the country. Messrs. George F. Hooper & Co.' the sutlers at Fort Yuma, will also be able to afford you many business facilities. You will find them most agreeable gentlemen, liberal and accommodating in all their transactions. It is proper to mention here that two steamboats ply upon the Colorado, from Fort Yuma, to the head of the Gulf of California. They are owned by Geo. A. Johnson & Co. The same remark made above applies to them, and I venture to predict your acquaintance with them will be both pleasant and profitable. I mention their names as you necessarily will have business transactions with these parties.

The road follows the Colorado river about eight miles, before striking across the great Colorado Desert. Near the point where the road leaves the river, an excellent grazing station can be established. It should be mentioned that in the "junction" of the Gila and Colorado rivers, a large quantity of grain can be raised, and here also is much excellent grazing.

About twenty miles below Fort Yuma, there is grazing for thousands of animals; and here, an enterprising settler last year cultivated a large crop of corn. The rise of the Gila and Colorado, like that of the Nile, brings plenty to the Indian population. The whole country, in seasons of high freshet, becomes golden with their gardens of pumpkins and melons. Along the whole route, from the Rio Grande to San Diego, you need not, after the first year, want for grazing. There is scarcely a point at which you would desire a station where grass will not grow, and it will be advisable for you to sow grass seed, largely, the first season. It will scarcely ever be necessary to repeat it. At many places it will be necessary to irrigate in order to raise grain, but you are aware of the immensely increased yield of irrigated lands, compared with those cultivated in the ordinary way.

From the Colorado river to Cook's wells, the first water on the desert, it is sixteen miles. Probably a more direct route exists from Fort Yuma, to the right of the river and these wells, and will be pursued by the railroad when built. The advantage of the river will I presume, induce you to follow the old route. Cook's wells are situated in a gulley to the left of the road, and will supply any desired quantity of water with a small outlay. These wells are undoubtedly fed from the Colorado. A plantation of cotton wood or willow can be made here, and with adobe buildings, and sowing grass seed, a good station can be erected. Twenty-five miles farther are the Alamo-mucho wells. The same remarks apply to these wells or to Cook's. About thirty miles beyond the Alamo-mucho, are the Indian wells. Here the soil is rich, and there is a pleasant grove of trees surrounding the well. A very good station can be made here. Eighteen miles more bring us to Sackett's wells, which will also afford an am-

ple supply of water. Sixteen miles beyond is the Carisa Creek, a small but permanent stream. Here, for several years past, a small store for the supply of grain, and ordinary provision to travelers, has been kept. From Carisa Creek to Vallecitas it is eighteen miles, and here the desert ends.

The above named wells include all the permanent watering places on the desert. In wet seasons, and during very high freshets of the Colorado, New River, Little and Big Laguna, the Mud holes, and other places between Cook's wells and Indian wells, are filled and remain full for months. New River, a branch of the Colorado, subterranean in dry seasons, becomes, during high water, a large rapid stream, difficult to ford; this, however, is of rare occurrence. Mr. Bartlett mentions the fact, that everywhere on the desert he obtained water by digging ten feet. The annual rise of the Colorado is in July.

At Vallecitas water and grass are abundant, and from here into San Diego. The road from this point, although hilly in some places, is generally well made, and runs through a beautiful country, filled with a population engaged in ranching and raising cattle. The distance given by Parke from Fort Yuma to San Diego is 190 miles. By the usually traveled route it is full thirty miles more than this. The road commissioners of San Diego county were engaged during the month of May in laying out a new road, which will much shorten the distance. The trail followed by the express mail from San Diego to Fort Yuma cuts off some sixty miles. From the Colorado to the Alamo-mucho wells, the road is slightly ascending, and heavy with sand; beyond, until within a few miles of Carisa creek, it descends slightly, and is hard and firm. A few miles of heavy sand is also found along the Carisa creek to Vallecitas. At Warner's ranch, midway between Vallecitas and San Diego, the road to Los Angeles diverges to the right.

As there is frequent and regular mail communication, by steamer, between San Francisco and San Diego, the nearest and most natural termination of your route is the latter city. If, however, by the terms of your contract, you are required to run your stages to San Francisco, you have choice of two routes: first, through the San Geronimo Pass, or one of the passes near it, to Los Angeles, and then following the coast line as laid down in Parke's railroad survey, and by Monterey to San Francisco—or you can go from Los Angeles, through the Tejon pass, into the Tulare valleys, down the San Joaquin and Sacramento. By this last named route, your mails and passengers would undoubtedly take the steamers at the San Joaquin river, for San Francisco, if expedition is desired. If your route terminates by stages at Los Angeles, or rather at San Pedro, the port of Los Angeles, the coast steamer would then take the mail and passengers to San Francisco in about two days. San Diego is, however, the natural terminus of a post route along the 32nd parallel of latitude. Both the coast route, and that down the San Joaquin, are so well known, traversing as they do the most beautiful and thriving portions of California, that farther mention of them is unnecessary.

In the preliminary survey which you propose to make of the route, it is desirable that you should select men accustomed to frontier life, and at least a portion of them well acquainted with the country. Mr. A. B. Gray, the well known engineer of the Southern Pacific Railroad, is your best choice as chief of the party. His extensive acquaintance with

the route and the people of Texas and Arizona, will enable him to select a thoroughly capable party, without trouble and at the least expense to yourselves. Fifteen or twenty well armed men can travel the route with perfect safety, if ordinary caution is observed. A military escort is not necessary, and probably, in the present state of our Indian relations in New Mexico, could be ill spared for such a length of time as your survey will occupy, if thoroughly made. If, however, the Hon. Secretary of War, upon your application, should detail an officer to accompany your party, and act in concert with your engineer, it would, perhaps, give additional weight to the results of your explorations, by giving an official character to the Report of your Survey.

The distances and camps given below are those of the First regiment of Dragoons, on their march from Fort Fillmore, New Mexico, to Fort Yuma. It must be remembered that on the march to Tucson, there were seven companies, with more than four hundred horses, several hundred mules and beef cattle, in addition to the numerical strength of the command, in men, more than four hundred, including teamsters. They were obliged, therefore, to make only such camps as would supply an abundance of water and grass. They made the entire march with scarcely any loss of animals.

	MILES.
From camp near Fort Fillmore,	
To camp above Mesilla.....	7
" Cook's Spring.....	52
" Rio Mimbres.....	20
" Ojo de Vaca.....	18
" Penasquitas.....	21
" La Cienega del Sauz.....	62
" Puerta del Dado.....	25
" San Pedro River.....	62
" Camp on west Bank of the San Pedro River...	6
" Las Cienega de los Pimos.....	24
" San Xavier del Bac.....	24
" Tucson.....	8
" Maricopa Wells.....	60
" Camp beyond Jornada.....	40
" Cross River twice and halt at ford.....	11
" Camp on Gila River.....	29
" " " ".....	25
" " " ".....	18
" " " ".....	20
" " " ".....	16
" Ferry on the Colorado, near Fort Yuma.....	8

Small parties can make much shorter marches; and as already observed, there are several intermediate watering places.

The organization of Arizona Territory is an absolutely necessary preliminary to the establishment and successful operation of the overland mail route to California. At present, there is no Court of Record throughout the whole territory. It is obvious that you must have the means of enforcing contracts for grain, provision, labor and other supplies, or you can not succeed. Neither life nor property is safe, at present, from Indian attack or private depredation. There is no security to land titles or mining interests. Almost all the available agricultural regions are covered by Mexican Titles, and these again by squatter claims. Until Congress, by some speedy and wise legislation, organizes an effective government, this country, with its immense resources, must be retarded in its development and remain a scene of disorder and anarchy. Large amounts of English and American capital are only waiting the security of law and order, to seek profitable investment, in the development of the silver and copper mines with which the country is teeming. It is by far too late to deny the existence of these treasures. Emory, Parke, Mitchler, Bartlett, Butler King, and Poston have only added new proof to the statements found in the old Mexican records, and which have been dwelt upon



by Ward and Wilson, in their valuable books. My own observation has convinced me that the story has yet to be told. To adopt the quaint language of a report made to the Spanish government, as early as 1720, "A scientific exploration of Sonora, with reference to Mineralogy, along with the introduction of families, will lead to a discovery of gold and silver so marvelous that the result will be such as has never yet been seen in the world."

I congratulate you, gentlemen, upon the opportunity you have to connect your names with the first direct communication overland with the Pacific. Your route is but the forerunner of the Southern Pacific Railroad, which will be speedily built, the doubts of many wise people to the contrary notwithstanding. Its practicability, at a reasonable cost, no man who has examined the question can for a moment doubt. A few more horrible disasters, like that of the Central America, steamer, will convince even Wall street of its great necessity.

I am, gentlemen, very sincerely, your friend and servant, SYLVESTER MOWRY,

Lt. U. S. A.

Metropolitan Hotel, N. Y., Sept. 20, 1857.  
To Messrs. Butterfield, Fargo, Spencer, Holland, Kenyon, and others, U. S. Mail Contractors.

#### OUR RAILROADS AND THEIR USES.

The Railroad interest is sadly depressed at the present time. We are sorry, moreover, to see a disposition in some quarters, still further to depreciate this invaluable species of property. The railroads are among the essential of the age. No great country can do without them. They facilitate trade and travel, increase the value of land, and open up to the hardy pioneer, new homes, and fresh sources of independence and wealth. What, indeed, would Philadelphia, New York, Boston and Baltimore be without railroads? What would be the condition of the mighty West at this time, but for these great highways, these links of steel which bind the Union together in a common brotherhood? But let us enter somewhat into detail, and show the true uses of railroads. A thousand points might be stated, calculated to prove their advantages; but on the present occasion, we will confine ourselves to a few. First then, they carry the mails of the United States, with a certainty and celerity never anticipated in olden times. Nor do they allow mail-robbers to stop the cars and bear away the letters.

2. They transport the soldiers of the Republic, with all the munitions of war, at all times, cheaply and expeditiously. During the war of 1812, a barrel of flour at Buffalo cost \$70, in consequence of the almost impassable roads thither, and the snail-like travel of the horse and wagon line.

3. They have enhanced the value of lands greatly in the eastern and middle sections of the Union, and in the almost boundless West, the value of the territory is nearly if not quite, quadrupled by them.

4. They have enlarged our commerce between the several States immensely. In fact they may be said to have taken up whole cities with their almost countless inhabitants, quietly, as if by magic, and have set them down in close proximity to other flourishing cities.

5. They, with the Telegraph, give speedy notice of the illness of sick or dying friends, and transport us to the bedside of those we love, at a moment most desired in one's whole existence.

6. Without them, the people of the eastern

metropolitan cities would be left in a great measure destitute of beef and produce from the great West.

7. They protect our seaboard from the assault of a foreign enemy, as they can upon the flash of the telegraph notify the whole West if any foe should threaten to land upon our soil, and thus hurry down to the point of attack innumerable men, and arms to drive back the assailants.

8. Nay, more, they may be said to stand in stead of forts. For no nation would think of venturing to land, with such swift and prompt lines, of railroads to pour down our forces upon them almost *instantaneously*.

9. It is now conceded by all reflecting men, that if a railroad had been in existence between Philadelphia and Washington the British would never have made an assault upon the capital of our country.

10. Nor would the French and English armies have carried the war into the Crimea, if the Emperor Nicholas, before he broke with the Turks, had been as sagacious as many represented him to be, and constructed railroads to run to the Black Sea, and thus at any moment have had it in his power to carry all Russia in arms to meet an approaching hostile force.

11. Our railroads are therefore a wall of defence, and may be pronounced the *Preservers of the Peace of our Republic*.

12. So prodigiously important are our railroads that were the companies to stop running the cars for a single week, the whole country would come to a stand still; our trade and commerce with the interior would be closed up, and our cities be filled with dismay.

13. Railroads should therefore, be sustained, that their benefits may be properly distributed. Surely every traveler would gladly agree to pay sufficient to give them a just remuneration, and thus shield these leading lines of travel that are now almost driven to the verge of bankruptcy from so disastrous a calamity.

14. The editors of the Public Press are deeply interested in the permanency and success of the railroads. They carry their journals from one end of this broad Union to the other. They impart life to trade everywhere. They fill our ships with produce at the wharves, and carry from our landings merchandise to the remotest boundaries of the nation. Now and then accidents may happen, but always sorely against the will of the companies. Nor should courts or juries pursue the goose that lays the golden egg, and kill her.

15. Our vast country can only be traversed by railroads. They have become an institution and cannot be abandoned. Let us, therefore, support them with a liberal if not a generous hand.

16. Congress should compensate them in a proper spirit. The Government now, by the enterprise of these companies get swift and sure mails, and by them, too, they are virtually protected from foreign assault upon its vast boundaries.

17. Besides, in many instances, where rails are imported, the railroad companies pay for duties on their rails more than they receive for transporting the government mails.

18. Moreover, we should look to the countless number of persons in the constant employ of the railroads, who are, even at this time kept on duty.

19. The compensation to be paid them should be so ample as to keep their stock at par, constantly at par, and then men would not lose, whose public spirit—in many in-

stances—urged them on to unite the vast interests of the people, by iron bands, in one brotherhood of affection.

20. The railroads should, therefore, act in concert, raise their tariff of charges to a just height, and not drag out an existence of feebleness, resulting, in some measure, from their own rivalries.

But enough for the present. The subject is an important one, and we may return to it again. Millions of money have been expended in railroads, and thousands of citizens have invested their funds in this description of property. Let us hope that the day is at hand, when confidence will revive, and when by some general and enlightened system of reform and management, every leading railroad line in the nation will be able to make a fair and regular dividend. The interests of the public at large require that these important improvements should be encouraged and sustained, and not depressed or depreciated.—*Penn Eng.*

#### TOLEDO WABASH & WESTERN R. R. CO.

The stockholders of this Company convened on Wednesday, the 7th day of October, 1857, at its general office in Toledo, it being their annual meeting for the purpose of electing a Board of Directors, and transacting other general and miscellaneous business.

The meeting was organized by the appointment of Hon. Robert Breckenridge, of Fort Wayne, Indiana, Chairman, and John N. Drummond Secretary.

The present condition of financial affairs of the Company having been the subject of general discussion, it was.

RESOLVED, That a Committee of three be appointed to embody in form, the unanimity of opinion expressed by the Stockholders present, and to report such necessary preamble and resolutions as they may deem proper, indicative of the present condition of the Company and its future policy,

The Chairman appointed, as such Committee, Hon. A. S. White, of Indiana, John Paul, of Ohio, and Parker Dresser, of Illinois.

The meeting thereupon proceeded to the election, by ballot, of fifteen Directors, to hold their office respectively for the period of one year.

On motion John Patrick, Esq., W. C. Holgate, Esq., and W. A. Page were appointed inspectors to receive and canvass the votes.

The polls were opened at 2 o'clock and continued open until 4 o'clock, when they were finally closed. Upon counting the votes, it appeared that the whole number cast was 25,656, which were unanimously given for the following named persons, to wit:

A. Boody, J. B. Varum, Edwin C. Litchfield and E. Whitehouse, New York; H. Pumpelly, Albany; Russell Sage, Troy; A. H. Tracy, Buffalo; Warren Colburn, Wm. Baker, Toledo; Robert Breckenridge, Fort Wayne; George Cecil, Logansport; Reed Case, Delphi; Jas. Spears, Albert S. White, La Fayette; Wm. Kent, Williamsport.

On motion it was resolved, That the Secretary of the meeting notify the said several Directors so elected of their election, and that their first meeting for organization, &c., will be held at Lafayette, Ind., on the 27th of October, inst.

Hon. A. S. White, in behalf of the Committee heretofore appointed, submitted the following report, to wit:

WHEREAS, The Toledo, Wabash and West-



ern Railroad has been prosecuted and built during a period of great financial embarrassment, when money could be obtained only at heavy sacrifices, and notwithstanding these disadvantages, it has been completed with all the economy consistent with a first class Road, and

WHEREAS, The Road in its material construction, in the perfection of its equipments, in its superior commercial facilities, warehouses, grain-houses, docks, &c., &c., and in its well-established connections with other roads on the direct communication from New York to St. Louis, has passed the period of infancy, when the resources of most roads are absorbed in the necessities of unfinished construction, and can challenge rank to-day in all its business capabilities with the ablest and best established lines in our country;—but incident to causes above alluded to, to the short crops of last season, when it was first opened for business, and to its heavy responsibilities during the period when it was consolidating its business elements, has met the present financial crisis in such a condition as to endanger its ultimate prosperity by paralyzing the credit on which alone can be borne through the stagnant interval of depreciated currency, sluggish commerce, and wide-spread bankruptcy, yet to precede the large anticipated traffic of the coming season, in the movement to the sea board of the immense crops in the West, now in store or fully matured, and the consequent exchange in the converse direction, unless a united and harmonious effort be made by all parties in interest, creditors, bondholders and stockholders, to sustain the work by a forbearance of all rigorous measures, which can only result in mutual loss, by a concession of seeming advantages, which are, in fact, but nominal or temporary, in favor of more permanent objects, and by the adoption of a line of policy which shall be calm, foresighted and liberal.

WE, THEREFORE, Stockholders, at this, our annual meeting, after a full review of the whole subject, and with as perfect a confidence now in the time of our greatest trial, as ever, of the value of the work, of the strong commercial position of the Road and of its remunerative character, do hereby recommend to our associate shareholders, the adoption of a plan of which the following is given as a skeleton or synopsis.

1. The first mortgage bondholders to convert the unpaid interest coupons of the 1st of August last, and those to fall due the 1st of February next, into shares of stock at par.

2d. The second mortgage bondholders to convert the three semi-annual interest coupons of May 1st, 1857, unpaid, Nov. 1st, 1857, and May 1st, 1858, into like shares at par.

3d. The income or third mortgage bondholders, and the real estate bondholders, to convert their bonds into like shares at par, rating each bond at 40 per centum of its nominal value or amount of principal and interest.

4th. The stockholders to surrender 75, per cent. of their stock.

5th to enlarge the issue of second mortgage bonds to an amount sufficient to liquidate the present floating debt of the company, or to provide an available security of equal value for that purpose.

This plan is suggested in strict reference to the supposed present security and its availability to the parties in interest, and to the ultimate protection of that interest, or so much

of it as is salvable and is marked by the following features:

1st. It will extinguish the floating debt of the company.

2d. It will relieve its income from all external demands until the 1st. of August next, by which time the Company will become so strengthened in its business and other resources as to be able to meet its bonded interest promptly, and to move forward without incurring a new floating debt.

3d. It will reduce the funded debt 16 per cent. of its amount, and the stock 75 per cent.

4th. It will thus diminish the entire capital of the company to \$7,500,000 on 243 miles of road.

A clear scrutiny of the above plan, followed by strict official economy and accountability will, it is believed, commend itself to all parties, as the very best to be devised. If the road is worthless, even the two first classes of bondholders are without an adequate security for their principal debt. If valuable, (as we believe) their concession will be a small one, since the stock to be taken up in lieu of two or three coupons, will be stamped with an increased value.

The holders of the inferior classes of bonds; it is evident must, without some remedial measure, be subject to a remote postponement, or the hazard of being cut off by a foreclosure of the older mortgages.

As to our own interest as stockholders, it is immaterial whether it is represented by ten shares or by forty, since the lesser number will confer the residuary ownership equally with the greater, and if future earnings should produce a surplus beyond what is expedient for dividends on the diminished stock, out of that surplus, new shares can be divided among the stockholders.

The stockholders, in proposing these measures to meet the exigencies of the Company, while they are desirous to preserve as far as possible their property in the road from forfeiture or destruction, are actuated by a determination to be just to all interests, not less to the holders of the minor securities of the company than to those holding preferred liens; believing that good faith prompts to the protection of the weaker party against any arbitrary or rash annihilation of his rights.

Resolved, That a committee of five stockholders be appointed to confer with the above named parties in interest for the adoption of the above or some similar plan, and to concert with those parties and with the Directors, the means for its practical accomplishment.

The foregoing have been concurred in with great unanimity, the Chairman appointed the following persons as such Committee, to wit:

John Roche, of Huntington; John Paul, of Defiance; M. M. Milford, of Attica; Chas. R. Richards, of Troy, and W. Chauncy of New York, with the request that they meet the Directors of the Company at Lafayette, Ind., on the 27th day of October instant.

There being no further business, the meeting adjourned to meet at the office of the Company in the city of Lafayette, on the 2d day of December. 1857.

R. BRECKENRIDGE, Chairman.  
J. N. DRUMMOND, Secretary.

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## MONETARY AND COMMERCIAL

The past week has been one of considerable stringency in the markets, as compared even with the previous stringent times. The effort to prepare for the first of November, on the part of merchants, and for annual taxes on the part of mere property-holders, has created a demand for money beyond the amount seeking temporary investment. Large amounts have been in our market seeking permanent investment, in the shape of real estate loans at 10 to 12 per cent., and there is now no difficulty in obtaining the most undoubted property at the above high figures. Discounts are less in favor among holders of money; while the banks, through some unexpected change, steadily refuse to expand. Most business men have contracted to the narrowest possible limits, while those whose engagements prevent their doing so, find it difficult to meet their paper promptly. We hear, however, of very few failures among our merchants, and those not among our heavy houses.

Stocks are as quiet as can be. There are no purchasers in market, and holders whose necessities would otherwise compel them to sacrifice, finding no opportunity to dispose, refrain from pressing.

The Missouri banks have suspended specie payments. Their notes are received as currency. The suspended New Orleans banks have not yet been reinstated.

The news from Europe by the last arrival are that the Bank of England has increased its rate of discount, as a precautionary measure, and that the panic is extending to Europe. The Persia brought one million in gold to New York. The effect of this will be favorable, but it will take a good many arrivals of the same nature to make a material change.

The following is a list of railroads which have suspended, as taken from a New York exchange:

Names.	Total Liabilities.
New York & Erie.....	\$33,000,000
Illinois Central.....	24,000,000
Philadelphia & Reading.....	20,000,000
Michigan Central.....	14,000,000
Michigan Southern.....	18,000,000
Cleveland & Toledo.....	7,500,000
Milwaukee & Mississippi.....	7,000,000
La Crosse & Milwaukee.....	14,000,000
Cleveland & Pittsburgh.....	6,000,000
Delaware, Lackawanna & Western.....	10,000,000
Chicago, St. Paul and Fond du Lac.....	5,000,000
North Pennsylvania.....	6,000,000
Cumberland Coal Co.....	6,000,000
Huntingdon & Broad Top.....	1,200,000
Steubenville & Indiana, estimated.....	5,000,000
Total.....	\$181,700,000

SALES AT THE NEW YORK STOCK BOARD—Oct. 26.	
\$16,125 N. Y. State 5s, '58.....	93½
2,000 N. Y. State 6s, '73.....	101
500 Ohio State 6's, '60.....	93
2,000 Michigan 6s.....	71½
11,000 Tenn. State 6's, '90.....	70
1,000 Virginia 6's.....	72½
3,500 N. Y. Central 6s.....	76
2,000 N. Y. Central 7's.....	90
2,000 Erie R. R. 3d Mortgage Bonds '83.....	49½
2,000 Goshen Branch Bonds.....	47
2,000 Terre Haute and Alton 2d mort. Bonds.....	35
5,000 Illinois Central R. R. Bonds.....	66½
183 shares New York Central.....	58½
205 " Erie R. R.....	9
26 " N. Hav. & Hart.....	105
30 " LaCrosse & Milwaukee.....	6
100 " Reading.....	25
10 " Mich. S. & N. Ind. pref.....	17
100 " Illinois Central.....	74½
200 " Cleve. & Pittsburg.....	83½
50 " Galena & Chicago.....	58½
200 " Cleveland & Toledo.....	65
15 " Chicago & Rock Island.....	69
17 " New Jersey R. R.....	108
50 " Del. & H. C. Company.....	90

## D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, wherever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,  
D. M. CARHART,  
Box 1531, Cleveland, Ohio.



## WAREHOUSE

No. 5 FRONT STREET,  
Opposite Public Landing,  
Cincinnati, O.

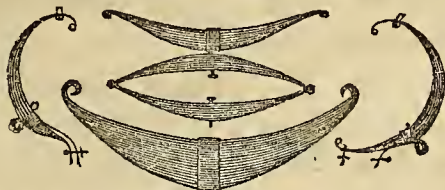
## PORTER, ROLFE &amp; SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.  
Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

## MCDANIEL &amp; HORNER,

## LOCOMOTIVE AND CAR SPRING



## MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

## References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va

ALBERT M. LEA,  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

## New Works on Civil Engineering.

THE Field Practice of Laying out Circular Curve for Railroads. By John C. Trautwine, Civil Engineer. 4th Thousand, in pocket-book form with tucks.

—ALSO—

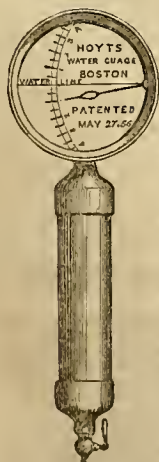
A New Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Tables and 10 Engraved Plates of Diagrams. By John C. Trautwine, C. E.; 2d edition.

Price, one dollar each. Postage on the Curves, five cents; on the Excavations and Embankments, eight cents. For sale by WILLIAM HAMILTON,

Hall of the Franklin Institute,  
Philadelphia, Pa.

Sept. 21-3\*

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 5 $\frac{1}{2}$  to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,  
Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS  
AND  
TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,  
EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Harlan & Hollingsworth,  
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience is car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

## Union Works, Baltimore.

## POOLE &amp; HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

## Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati

J. T. CRAPSEY,  
ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,  
CINCINNATI

## SCHENECTADY

## Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

## LOCOMOTIVE ENGINES,

AND TENDERS, AND

## RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't.

Aug 16



**GENERAL**  
**RAILWAY SUPPLY AGENCY.**  
**SNOOK & HILL'S PATENT**  
**LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
**MANUFACTURERS' AGENT,**

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**  
**Mechanical Engineer,**  
 AND  
**AMERICAN AND FOREIGN PATENT AGENT,**  
 No. 36 CHATHAM STREET, N. Y.

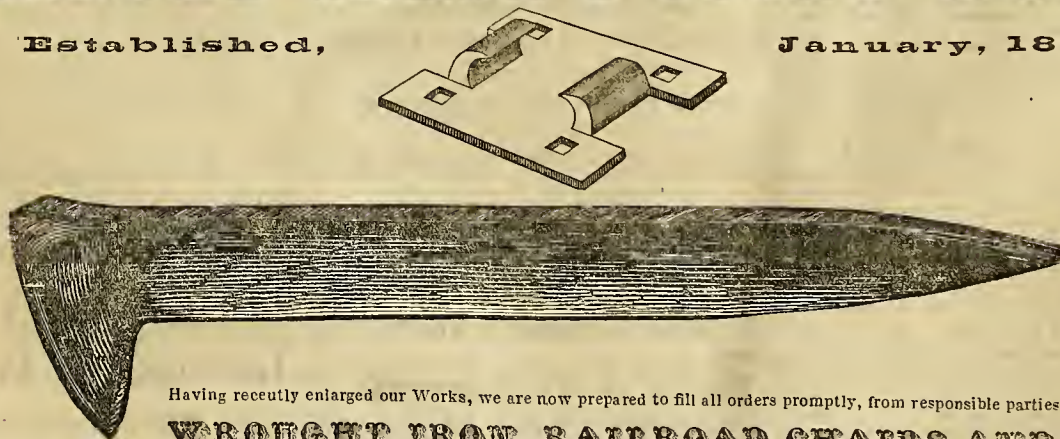
Entrance 5 Tryon Row.  
 Applications for Letters Patent. Careful written  
 Opinions of inventions. Important aid in bringing out  
 inventions. oc23

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. 4 miler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, and can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.17

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



## Most Direct Route to the East. BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and  
Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH  
PHILADELPHIA AND NEW YORK,  
BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route.

#### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,  
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.

### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 7:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,  
July 10 Sup't Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, and Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1856.

## LITTLE MIAMI AND COLUMBUS AND XENIA

## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,  
PITTSBURGH,  
DUNKIRK,  
BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

#### TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

#### FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster, and Zanesville; Chillicothe; and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

#### FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 17

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omni-bus L  
Office No. 2 Burnet House.

1856. 357.

Summer Arrangement.

1857.

## Cincinnati, Hamilton & Dayton [TRUNK LINE.]

## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

#### THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPORT  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

#### SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Port Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connect—at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest for East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

#### "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

#### Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

#### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

#### RETURNING TRAINS

Leave Dayton at 5 and 8:35 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

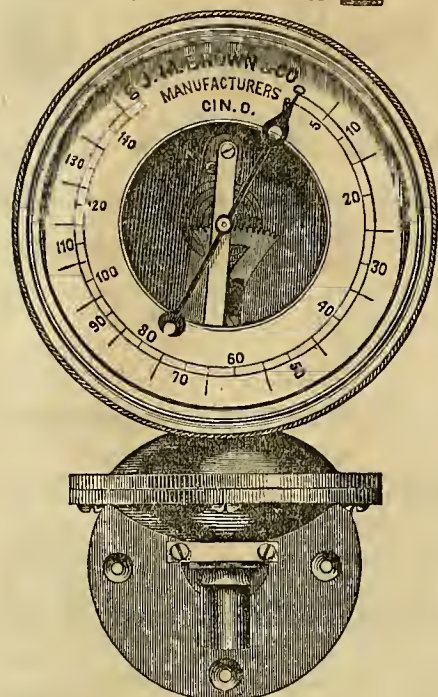
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent;



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

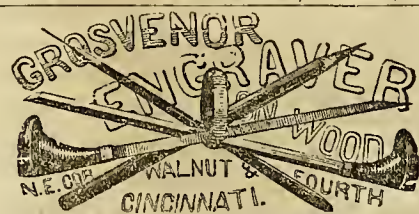
THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

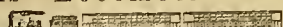
every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

# Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy. 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,  
1 1/2 to 7 inches outside diameter, cut to definite length, as required.

WROUGHT IRON WELDED TUBES.  
From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 55 to 61 lbs. per yard 200 tons  
rails 49 lbs. per yard. 1,000 tons rails 55 lbs.  
per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. H. GOODMAN & CO.,  
Feb 7. '66-2m.1 no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,

NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush

Printed & Ucent do., Entirely New Designs;

MOQUETTES & VELVET CARPETS;

Enameled Cloth, for seats & backs of Cars

ROPE MATTING, Every Width

Oil Cloths for Head Linings, Enameled with Gold and Silver;

DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION & MATTRESS FILLING

N. B. We have the Plush in bond for exportation.  
sepl8 DOREMUS & NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman,  
CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

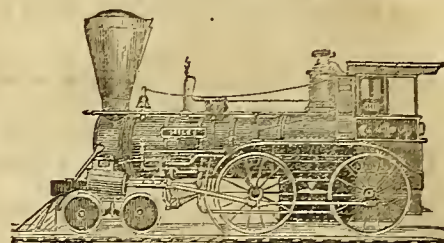
The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
Aug14-ly President of the Board.

# CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lug and  
Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Car  
Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trimmings  
for windows and Seats. Varnish, Coach Japan  
and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
f.oe6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—

are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

OLIVER MEAL. (The highest prize) awarded to McGowan's Compound Steam Pumping Engine at the late Fair  
Ohio Mechanics' Institute. June 18, 1855



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI;

THURSDAY MORNING,.....NOVEMBER 5, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " " per month.....	3 00
" " " six months.....	12 00
" " " per annum.....	20 00
One column, single insertion .....	4 00
" " " per month.....	10 00
" " " six months.....	40 00
" " " per annum.....	80 00
One page, single insertion .....	10 00
" " " per month.....	25 00
" " " six months.....	110 00
" " " per annum.....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 37.

#### EDITORIAL.

Railroad Law—Important Decisions.....	577
Coupons Payable in New York, Nov. 1.....	577
Illinois Southern R. R.....	578
Grayville & Mattoon R. R.....	578

#### RAILROADS.

Lexington & Big Sandy R. R.....	579
Grand Trunk Railway, Ca.....	580
New Orleans & Great Northern R. R.....	582
Illinois Central R. R.....	583

#### MISCELLANEOUS.

Hudson's Bay Company.....	578
The New York Clearing House.....	582

#### MONETARY AND STOCKS.

Sales at the New York Stock Board.....	584
Monetary and Commercial.....	584

### COUPONS PAYABLE ON NOV. 1, IN NEW YORK

The following Companies are paying their interest coupons in New York:

New York & Erie R. R. Co., on \$3,000,000.

#### First Mortgage Bonds.

Indianapolis & Cincinnati R. R. Co.

Patterson & Ramapo R. R. Co

Harlem R. R. Co.

Terre Haute, Alton & St. Louis R. R. Co.

Madison & Indianapolis R. R. Co.

Little Miami R. R. Co.

The following are also due:

Cincinnati, Wilmington & Zanesville R. R.

First Mortgage \$2,500,000.

Galena & Chicago R. R. Second Mortgage,  
\$2,000,000, at 7 per cent.

Indiana Central R. R., \$600,000, at 7 per cent.

LaCrosse & Milwaukee R. R., \$950,000, at 8 per cent.

New Albany & Salem R. R., \$2,325,000.

Peoria & Oquawka R. R., first division, \$500,000, at 8 per cent.

Michigan Southern R. R., \$9,000,000, at 7 per cent.

New York Central, \$8,422,600, at 6 per cent.

VOL. 5.—No. 37.

### RAILROAD LAW—IMPORTANT DECISIONS.

We have before us the valuable work of EDWARD L. PIERCE, Esq., on American Railroad Law, and also two or three important decisions recently made. They remind us of an extreme interest which is attached to this new branch of jurisprudence, and that we should occasionally bring before our readers the substance of the new law, rapidly rising up, on this subject. Before commenting on two or three points now discussed, and which involve great interests, we desire to say that this work of Mr. Pierce will supply a desideratum in a railroad or a law library. It is self-evident that machinery so complicated, so powerful, and so mixed with all commercial business as a railroad, must, in the very nature of things, give rise to numerous legal decisions, both fresh and deeply interesting to the public. The principles on which these decisions rest are not new. They are elementary in the law, but the applications of them are new and important. So far as we may assume to judge, Mr. Pierce has well arranged and digested his materials. His accuracy we take for granted, for we know that Mr. P. is both intelligent and diligent. We now call the reader's attention to some of the points now being discussed with great earnestness.

#### 1. How far and to what does the mortgage interest of the bondholder extend?

On page 530 of Pierce's American Railroad Law the doctrine on this subject is thus laid down. "Where the power to mortgage exists the question may arise as to what is covered by a given mortgage. It is a general principle of the common law that the subject of a mortgage must be in existence when it is made, and that nothing passes by it which does not, at the time it is made, belong to the mortgage. But when the company, under competent authority, conveys by mortgage its road and all its property, with all its corporate franchises and rights, as one entire thing, including, among other franchises, the right to acquire future property, and in effect conveys the corporation itself, subsequently acquired property will pass to the mortgagee, as an incident and accession to the mortgage. The right to acquire the property being one of the franchises conveyed, it is included within the mortgage, and property acquired afterward, by virtue of its exercise, is acquired and held under and subject to the mortgage." The law thus laid down is undoubtedly that of recent decisions. It is the doctrine of the Court of Appeals in Kentucky, in the case of *Seymour vs. Barnett*, June, 1856. We regard this as one of the most important points which has or can come up in relation to railroads. It is proper, therefore, to look a little into the reasoning on this subject. It may be regarded in relation both to law and expediency; for it is quite evident that expediency is not to be wholly disregarded in cases of this sort.

As to the law, it is plain that the law has been stretched a little to attain an end; for the principle of the common law is that what is not in existence cannot be mortgaged. This being the principle, what is to take a railroad out of the case, and make it an exception? 1. That the company have conveyed the corporation itself away; that is, mortgaged its franchises. Can they do this? Looking again to the general principles of law, it would seem that they cannot. Yet, in the case of the Sandusky and Mansfield Railroad, it was decided that a railroad company could and had mortgaged its franchise—the corporation itself. 2. That the subsequently acquired property is an incident to the corporation then mortgaged. If it were said that a locomotive was necessary to a railroad it would be true; but it is not quite so clear that the locomotive is an incident to the power to buy one! This seems to us a very decided stretch of legal inferences. For example, suppose that ten locomotives is the outside number required for a given road, and the company buy fifty for purposes of speculation, or other motives—how does it follow that the other forty are incident to the franchises of the company? These franchises were given only to make the road and carry on its business. The courts, however, have stretched the law; and let us now inquire into the motives, in other words, the expediency of these decisions, and here we incline to agree with the courts. If they are satisfied to make the law what they have decided it, we think there are sound reasons for the principal parties connected with railroads to be contented with it.

When we look at the parties interested in a railroad, we find them (aside from the public) to be divided thus:

1. The stockholders;
2. The bondholders;
3. The holders of the floating or unsecured debt.

Now if these several parties are to engage in a legal contest for their respective rights, with an uncertainty as to the result, the chances are ten to one that they will mutually destroy each other, and the road pass into other hands. It is expedient, therefore, if it can be done, that the relative rights of the parties should be so settled that the fewest number should suffer; and that is done by these decisions. It will be observed that, in fact, the litigating claimants against a railroad, who endeavor to seize property in execution, are the holders of the floating, unsecured debt. Against these it will be observed that the interest of the stockholder and the bondholder are identical. The bondholder does not want the road, but his interest only, which can only be had by keeping the road in motion. The stockholder don't want the road sacrificed. The mortgage is a protec-



tion to the stockholder against minor creditors. Accordingly we see, as in the *Covington* case, the bondholder steps in, and, by virtue of his mortgage, defends the stockholder. He enjoins the minor creditor who comes with an execution against the machinery, and that, too, when it was purchased long subsequent to the mortgage. It is obvious that, in regard to the road and the public, this defense, by way of legal decision, is *expedient*. But is there any one at all really injured? When we come to look at it sharply, had the general creditor any right to expect any other result? We think not. He knew the company was a corporation for the public service. He knew it was mortgaged to these bondholders.—What right, then, had he to expect that the machinery of the road should be sold, or the bondholders displaced to secure him? He took no specific security, and certainly cannot rightly call upon the courts to give him one.

The practical fact is this,—that if a railroad cost one hundred millions of dollars, it would be worthless as property, without its machinery, fuel, station houses, &c. The locomotives and cars must be renewed, as they wear out. If, therefore, the bondholders cannot hold, by their mortgage, the locomotives and cars subsequently acquired, then undoubtedly there must arise a time, when the road will be stopped. A. B. & C. will be paid just debts to the amount of fuel, or ten thousand dollars, but millions of property will be destroyed. Expediency and equity, therefore, are in favor of this decision of the courts; and if the law has been stretched, it has been stretched in application to the state of facts, rather than in principal. It may be asked here, how are these minor creditors to be paid? We answer, they never looked to anything but the general credit, or profits of the company, and they cannot expect to be paid except from the income of the company, and must abide the result. We shall consider in another article, the right and relation of cities and municipalities, to railroad routes, a very interesting subject.

**ILLINOIS SOUTHERN R. R.**—The Chief Engineer of this Company, C. Jennings, Esq., has made his report to the Board on the preliminary survey of the line.

Hon. S. H. Martin of Grayville has been elected a director to fill the vacancy occasioned by the resignation of C. B. Brown, Esq.

The whole distance from Vincennes to Mound City is 150 miles, estimated to cost, when complete and running, \$2,800,000.

**R. R. PROJECT IN MISSOURI.**—A project has been started for building a railroad from Jefferson City to St. Joseph, through Boone, Howard, Chanton, Carroll, Ray, Clay, Platte and Buchanan counties.

**WABASH VALLEY R. R.**—This road is progressing. The line from Marshall to Palestine is nearly all under contract.

#### HUDSON'S BAY COMPANY.

An important controversy has been going on for sometime in reference to a modification of the charter of this company. The following is a portion of the report of a select committee of the English House of Commons on the subject.

Among the various objects of imperial policy which is important to attain, your committee consider that it is essential to meet the just and reasonable wishes of Canada to be enabled to annex to her territory such portion of the land in her neighborhood as may be available to her for the purposes of settlement with which lands she is willing to open and maintain communications, and for which she will provide the means of local administration. Your committee apprehend that the districts on the Red river and Saskatchewan are among those likely to be desired for early occupation. It is of great importance that the peace and good order of those districts should be effectually secured. Your committee trust that there will be no difficulty in effecting arrangements, as between her Majesty's government and the Hudson's Bay Company, by which these districts may be ceded to Canada on equitable principles; and within the districts thus annexed to her, the authority of the Hudson's Bay Company would of course entirely cease.

Your committee think it best to content themselves with indicating the outlines of such a scheme, leaving it to her Majesty's Government to consider its details more maturely before the act of Parliament is prepared which will probably be necessary to carry it into effect.

In case, however, Canada should not be willing at a very early period to undertake the government of the Red River district, it may be proper to consider whether some temporary provision for its administration may not be advisable.

Your Committee are of opinion that it will be proper to terminate the connection of the Hudson's Bay Company with Vancouver's Island as soon as it can be conveniently done, as the best means of favoring the development of the great natural advantages of that important colony. Means should also be provided for the ultimate extension of the colony over any portion of the adjoining continent, to the west of the Rocky Mountains, on which permanent settlement may be found practicable.

As to those extensive regions, whether in Rupert's Land or in the Indian Territory, in which, for the present at least, there can be no prospect of permanent settlement, to any extent, by the European races for the purpose of colonization, the opinion at which your Committee have arrived is mainly founded on the following considerations:

The great importance to the more peopled portions of British North America that law and order should, as far as possible, be maintained in these territories. The fatal effects which they believe would infallibly result to the Indian population from a system of open competition in the trade, and the consequent introduction of spirits in a far greater degree than is the case at present: and the probability of the indiscriminate destruction of the

more valuable fur-bearing animals in the course of a few years.

For these reasons your Committee are of opinion that, whatever may be the validity or otherwise of the rights claimed by the Hudson's Bay Company, under the charter, it is desirable that they should continue to enjoy the privileges of exclusive trade which they now possess, except so far as those privileges are limited by the foregoing recommendations.

Your Committee have now specified the principal objects which they think it would be desirable to attain; how far the chartered rights claimed by the Hudson's Bay Company may prove an obstacle to their attainment, they are not able, with any certainty, to say. If this difficulty is to be solved by amicable adjustment, such a course will be best promoted by the Government, after communication with the Company, as well as with the Government of Canada, rather than by detailed suggestions emanating from this Committee.

The object proposed by the Canadians is to open the country for settlement. That of the company is to retain it as a hunting ground for their trappers. The Canadians are determined, and so are the Company. How the controversy will end, remains to be seen.

## Railroad Daguerreotypes.

No. LXXXVI.

GRAYVILLE & MATTOON R. R.

The report of this road is dated October, 1857.

The following are the officers:

President—ALFRED KITCHEL, Olney, Ill.

Treasurer—M. O'KEAN, Newton, Ill.

Secretary—JOHN WOLF, Olney, Ill.

Chief Engineer—D. H. KENNEDY, Olney, Ill.

#### DIRECTORS.

A. KITCHEL, Olney.

A. L. BYERS, "

M. O'KEAN, Jasper county.

T. J. MARTIN, "

E. FULLER, "

WM. NICH, "

J. SHIFFERSTIEN, "

WM. SMITH, Cumberland county.

J. CUNNINGHAM, Coles "

Length of road.....About 90 miles.

Termini.....Grayville and Mattoon.

This road was chartered by the Legislature of Illinois last winter. The company has been duly organized, and stock to the amount of about \$100,000 subscribed; but, on account of the present money crisis, it has been deemed inexpedient to make any farther exertions at present. We have no doubt but that as soon as the money crisis passes over, they will be enabled to raise a sufficient amount of stock to grade and cross-tie the road, and to lay the iron and put on the rolling stock; in fact to do everything except the purchasing of the iron.

The whole of the stockholders and officers are residents along the route, and feel that an outlay to build the road will be a good investment by the increased value of land.

The total value of the foreign exports from Philadelphia, last week, was \$228,197.



## Railroads.

### LEXINGTON & BIG SANDY R. R.

We are just in receipt of a full and comprehensive Report of this company, made in June of the present year. Companies should print and circulate their reports earlier than they do. Had this report been in full circulation in advance of the present crisis, it must have been of benefit to the road. We make such extracts as will give a fair idea of the condition of the enterprise. The Report says:

"In 1854 it was announced to you that a contract for graduation, bridge superstructure, masonry, ballasting and track-laying, deemed advantageous to all parties, had been made with DeGraff, Foster & Co. From the representations of these contractors, of their inability to go on with the work, as provided in the contract, at their instance and request the company, at different times, passed resolutions authorizing loans or advances of sums of money beyond the amount of cash provided in the contract to be paid, so as to enable those contractors to progress with the work; and so great was the solicitude of the Board to have this done that, with the cash provided in the contract to be paid, enough money was advanced or loaned to the contractors to pay the cash estimates of all the sub-contractors in full. The money thus paid and loaned, however, was not all used in the payment of sub-contractors, as DeGraff, Foster & Co. are still indebted to a portion of them.

"Notwithstanding these loans, the contractors, last fall, gave notice to the company that they claimed the privilege of suspending the work on the road, and they did so suspend it shortly thereafter; indeed they were having but little work done for some time before suspension. Such was the progress which had been made on the work between Lexington and Mt. Sterling, and between Ashland and Gallion's, on Williams' creek, in Carter county, that the Board became well satisfied it would operate most injuriously to the interest of the company to permit the work to be suspended for an indefinite length of time, and from the rumored and apparent embarrassed condition of the contractors, it was believed they never would again re-commence the work on the road. Iron enough having been already bought to lay the track for ten miles, for about nine of which the track was then nearly ready, the Board became well satisfied that it was the interest of the company to have the work progress, ordered or authorized the President to make contracts with others for completing the work on the parts of the road before alluded to; and in pursuance to that authority nearly the whole work on those divisions has been re-let, and the work of construction has never ceased,

but recently it has been increasing to a considerable extent.

"An effort was made by the contractors to prevent the Board from having the work go on, but that effort has been fruitless and unavailing.

"The money thus loaned or advanced to the contractors exceeds one hundred thousand dollars.

The contract required the company to pay to the contractors fifty per cent. in cash, twenty-five per cent. in the bonds of the company, having ——— years to run, and twenty-five per cent. in the stock of the road. The sub-contractors were generally to receive fifteen per cent. of the contract prices in the stock of the company.

"As an indemnity for the loans, the company retained in their hands whatever was due to the contractors in bonds and stock, except so much of the latter as would be sufficient to pay the sub-contractors as it might fall due to them.

"The amount of work done, according to the engineer's estimates, on the line of the road, up to December last, was upwards of six hundred and twenty-seven thousand dollars.

"The credit of the contractors had become so bad, before they gave notice of their intention to suspend, that one or more of the sub-contractors, who were on work most necessary to be completed, avowed a determination not to work longer; and to induce such to go on with the work, this company became responsible for the money for the work thereafter done, and by this means kept such work in progress; and the company has paid to such sub-contractors the amount which was due from the contractors; but these sums are not embraced in the amount above named, as loaned to the contractors.

"The prices now being paid, under the recent contracts, are less than those of the first contract; but eighty-five per cent. is now payable in cash, and fifteen per cent. in the stock of the company.

"The course pursued by the contractors, and their embarrassed condition, having made it necessary for this company to make other contracts for grading the road, the contract with DeGraff, Foster & Co., by resolution of this Board, was declared forfeited by said contractors, it being very clear that it had been so forfeited some time before it was declared so.

#### ROAD IN OPERATION AND FREIGHT.

"The road from Ashland westward to Gallion's, about seventeen miles, is being constructed, and the first six miles of it, towards the Stewart tunnel, is completed, and the engine is now seen moving along the track in that mountain region, and transporting iron and other freight to the river. There are many iron furnaces, which supply a large tonnage

to that part of the road now in running order, and freight on the pig iron alone which will be transported over that end of the road it is believed will pay all running expenses and six per cent. on the cost of that much of the road.

"Besides the pig iron taken to the Ohio river over this part of the road, coal will be shipped in large quantities, and will give profitable employment to the road. Fine seams of coal are along the line of the road from Ashland as far westward as twenty-five or thirty miles, and in a very short time the road will have a heavy tonnage in coal.

#### CONTRACT FOR COMPLETING SEVENTEEN MILES.

"Within a few weeks past a contract was made by this company with the Kentucky Iron, Coal and Manufacturing Company, by which the latter agreed to pay to this company thirty-seven thousand dollars in cash, and to pay the contractors from Ashland to Gallion's for all work done after the first of April last; also to furnish iron and all other materials, together with the necessary rolling stock, &c., and receive in payment the bonds of said manufacturing company, which had been issued on their subscription to this company. The amount to be furnished in those bonds is one hundred and seventy thousand dollars, leaving \$40,000 of their bonds, most of which have been sold by this company—their whole subscription having been two hundred and ten thousand dollars. By this contract the means of the company at the east end of the line are to be there used, and those at the west end are to be used from Lexington eastward.

#### LEXINGTON AND FAYETTE SUBSCRIPTIONS.

The mayor and council of the city of Lexington attempted to avoid a subscription after the people had voted for it, but after some litigation the courts decided that they should make the subscription. Within a few weeks past bonds to the amount of \$50,000 have been issued by the city of Lexington, but the mayor and council refuse to issue any more except on conditions which the Board have refused to comply with. Of the bonds issued by this city none have been sold, but are all subject to and offered for sale.

"In February, 1853, the people of Fayette county voted a subscription on the part of that county of the sum of \$150,000 to the stock of this company, and although the proper officers attended at the several precincts of voting, and conducted the election as all other elections, and the election was advertised in the newspapers at Lexington for more than six weeks before the election, yet, because the county court had entered of record no order for holding the election, that court refused to make the subscription, and this company has not been able to coerce it.

"The subscriptions of the counties were paid in the bonds of the respective counties.



having thirty years to run from April 15, 1853—one-third being then delivered to this company, another third one year thereafter, and the remaining third in April, 1855.

#### CONTRACTORS' STOCK.

"By the contract made with DeGraff, Foster & Co., it was agreed they should take in stock \$625,000, to be paid in work on the road. They having failed to go on with their work, and not being able to do so, and this company having already put much of it under other contractors, there are 3,148 shares of available stock which have been earned by them, of the par value of \$157,418 52. The contract having been forfeited by DeGraff, Foster & Co., it has been so treated by this Board for several months past.

#### OTHER SUBSCRIPTIONS.

"The Lexington & Frankfort Railroad Co. have agreed to subscribe \$50,000, and the Louisville & Frankfort Railroad Company \$100,000 in the capital stock of our company, on certain conditions, which this Board have agreed to.

#### LANDED SUBSCRIPTIONS.

"Much the largest portion of the landed subscription was received by the commissioners who were appointed by the charter to receive subscriptions; and those which have been received since the organization of the company were not so received until the title, locality, value, &c., were fully examined into and ascertained; indeed there has been but little subscribed since the organization of the company except by one person, a worthy and public spirited minister of the gospel.

"Most if not all of these lands are supplied with fine beds of iron ore, in great abundance, and having both cannel and bituminous coal. Professor Mather was requested to examine one of the tracts, containing ten thousand acres, and he says of it: 'My attention was called to the company's land on Deer creek. It is well supplied with iron-ore, like the furnace region around, and contains the cannel coal seam, and doubtless the other workable seams of coal, though the latter were not seen. It is valuable mineral property, and well timbered.'

"The company owns several houses and lots, which were taken as stock, which, in the aggregate, rent for much more than six per cent. on the cost. One of these houses is occupied as the railroad office.

"Nearly or quite all the hill lands which have been subscribed as stock to this company, lie in the counties of Carter and Morgan, in both of which the coal and iron ore abound of the finest quality and in the greatest profusion and abundance; but, being distant from market, and without facilities for reaching it, these rich mines are dormant, and comparatively valueless, yet, by the completion of our road, will be rendered of immense value.

"The quantity of mineral lands owned by the company is about twenty-five thousand acres, which are valued at \$300,000. They lie in the region referred to by Prof. Mather in his geological report to our company, and also by Dr. D. D. Owen, the State Geologist, in his report to the Legislature.

#### CONDITION AND RESOURCES.

"By the books of the Secretary the following facts will appear:

The amount of cash paid on construction to the former contractors is.....	\$419,569 14
Cash paid second contractors along the line of the road after failure of first contractors.	14,531 10
Cash paid for iron, including freight, duty, &c.....	71,941 04
Cash paid for cross-ties.....	9,133 15
Cash paid for track-laying.....	1,920 00
Cash paid for engineering.....	56,783 04
Cash paid for salaries.....	15,494 05
Cash paid for printing and advertising.....	681 84
Interest and exchange.....	32,005 81
Commissions for selling county bonds.....	11,132 00
Right of way and depot grounds.....	42,954 74
General and miscellaneous expenses (Secretary's report).....	18,468 63
625 county bonds were received by this company, of which 87 are unsold; 538 county bonds sold for.....	357,537 09
Cash received from individual stockholders..	47,865 98
Interest received on county and Ashland bonds, and rents.....	81,177 02
Cash for 38 bonds on Kentucky Iron, Coal and Manufacturing Company.....	25,233 33
60 bonds of same company.....	35,000 00
112 bonds of same company are sold at 66½, to be paid in finishing the work and paying for the work west of Ashland, furnishing iron, rolling stock, &c., about seventeen miles.	
The 87 county bonds are, in part, hypothecated for a debt of the Western Bank of.....	40,000 00
The amount of debts due to other banks and banking companies is.....	97,737 72
Due for chairs and spikes.....	1,376 00

"The account of the house in New Orleans which received our iron has not been adjusted, but it is believed nothing is due to them. The commission house in Cincinnati which received our iron there has not furnished an account to show how we stand; and this may be said of our agents in New York, who have informed us of the purchase in Europe very recently of five thousand tons of railroad iron for our road.

The assets of the company are as follows:

The bonds of the city of Lexington.....	\$150,000 00
The interest due from same, about.....	30,000 00
Due from private stockholders.....	60,000 00
112 Ashland bonds, sold at 66½.....	\$74,666 67
The sum paid thus far on them.....	6,576 43
Depot grounds in Lexington.....	68,080 24
Depot grounds in Mt. Sterling and Winchester.....	5,750 00
Lands in Fayette, of Graves and Goodwin, about.....	1,250 00
Houses and lots in Mt. Sterling, Wyoming, Grayson and Catlettsburg.....	2,000 00
Cash due for lands sold in Clarke, about.....	7,100 00
25,000 acres of coal and iron lands, at \$12.	4,000 00
The mineral lands in an adjacent State, not more favorably situated than these lands, sell much higher.....	300,000 00
Depot grounds at Hampton City, the east end of the line, and land over which the road passes, and those contiguous through the whole line, which have been donated by the proprietors, or purchased and paid for by the company.....	250,000 00
The Lexington & Frankfort Railroad Co., by a vote of the stockholders, have agreed to subscribe to our capital stock, but not to be paid until the locomotive can pass from their road, over ours, to Mt. Sterling.....	50,000 00
The Louisville & Frankfort Co., on the same conditions, have agreed to subscribe and pay.....	100,000 00

"Whilst we cannot use these two last subscriptions until our road is in running order from Lexington to Mt. Sterling, yet we can anticipate those subscriptions, and, after complying with the conditions, make use of them in paying what we anticipate.

"The rolling stock at Ashland cost about \$10,500.

"No company bonds have been sold unless they have been sold to pay for the 5,000 tons of iron recently purchased abroad. The terms of that contract have not yet been communicated to us. This 5,000 tons will not be quite enough to reach from Lexington to Licking river."

#### GRAND TRUNK RAILWAY CO.

The directors of this company in Canada have recently issued a report of its condition and progress. The report reiterates the conviction that when the Grand Trunk road shall be finished according to its original plan, it will form the great avenue for communication between the West and the seaboard. The published reports as we have them, do not give the financial condition of the company; but they give enough to show that the stockholders must wait long before they may expect dividends from the earnings of the road.

The report of the Managing Director, S. P. Bidder, says:

"Since the date of the last report, no additional mileage has been opened, and the shareholders will bear in mind that the line still remains in unconnected sections, a fact which fully accounts for the business of the road being almost altogether of a local character.

"In referring to the traffic returns herewith submitted, it will be seen that out of a total of 663,023 passengers, 555,012 were local; and out of 375,221 tons of freight, 316,599 were also local figures, which must be considered as gratifying in regard to the local resources of the railway, and as amply confirmatory of the expectations of local traffic given in my previous reports.

"It has already been said that the company's lines are still disjointed—that the line from the Great West to the Atlantic is still incomplete, not only at Sarnia and London, but also at Toronto and Montreal; and that as a consequence, the through traffic naturally seeks the old channels in preference to the new route with its, at present, numerous transshipments; facts sufficiently explanatory by themselves of the meagre receipts from through traffic, and when coupled with these, it is borne in mind that the general depression in the commerce of the whole of the Northern portion of the Continent has been such that the ordinary travel of the main railways of the neighboring republic, as well as of the Great Western of Canada, has decreased from 12 to 20 per cent., as compared with the corresponding period of the past year, it may fairly be said that for the present no estimate can be formed of what the traffic will be when the lines are unchecked by any such depression, as that through which the whole community has just passed.

"Nor must it be forgotten that one of the anticipated principal sources of revenue in the Eastern sections of the road, viz: lumber, has been almost entirely withdrawn since 1854 and '55, when the depression in that staple of the country was so great that the subsequent period of two years has barely sufficed to restore it to its former importance in the products of the Province.

"The prospects are now, however, of a much more cheering character.



"The links which have been referred to as wanting in the main chain of communication from West to East are the Esplanade in front of the city of Toronto, over which will be made the connection between the Montreal and Toronto and Toronto and Stratford, London and Sarnia sections—the lengths between Stratford and London—Stratford and Sarnia—the extension east of St. Thomas and the Victoria Bridge, all of which are now being pushed forward with the utmost vigor.

"The total length of railway now open is 894 miles, and in view of the very large increase of traffic which may be expected this winter, it has been found necessary to increase not only the rolling stock by 47 additional engines and 400 box cars, but also the station accommodation, particularly as regards the freight arrangements, which have had to be considerably extended, especially in the West. Additional 'stables' for the new engines ordered are now in course of construction at Toronto, Belleville, Brookville, Longueuil and Island Pond; and even in this extra expenditure, which the requirements of the traffic have necessitated, more still remains to be done if the main features of this great enterprise be carried out as originally intended, viz: the making of this Trunk line the high road for the conveyance of the breadstuffs of the illimitable corn fields of the West to the ocean; and I have, therefore, to advise the Directors of the necessity for immediately erecting commodious granaries at such points as Kingston, Prescott and Montreal, without which accommodation it would be in vain to attempt to compete successfully with the rival routes on the opposite shores of the water communication; and I earnestly recommend that no time should be lost in the speedy completion of these works.

"In drawing attention to the Revenue Accounts for the past half year, it will be seen that the total receipts have been £289,468, 19s. 7d. currency, while the expenditure had reached the sum of £284,688 10s. 7d., leaving a balance of only £4,780 9s. 0d., to the credit of the revenue account.

"The excess in the estimated amount of expenses for the mile run is almost solely attributable to the very large expenditure which has been necessitated in "extraordinary repairs" in the leased lines from Montreal to Portland, in the rerolling and relaying of lengthy sections of rails and in the entire renewal of bridges, and I have still to inform the Directors that these works of renewal in this section are yet going on, and will require an amount of nearly £50,000 before it is put in the same safe and sufficient state which characterises the other sections of the Grand Trunk line built by the English and Canadian contractors since the amalgamation.

"The Emigration arriving at Quebec, has received, during the past year, my especial attention, and I have to state that the through-booking arrangements, as completed by Sir Cusack Rooney, in England, have been productive of the most beneficial results, as regards the comfort and expedition with which the Emigrants have been conveyed to their places of destination, after their arrival in the St. Lawrence.

"The number who have availed themselves of the Through Tickets has been, up to the present time, nearly one-third of the total number of Emigrants who have arrived; and I may also mention that over 100,000 books, maps, and general information circulars, with reference to Canada as a home for the Emigrant, have been gratuitously circulated from

the London Office of the company throughout the British Isles, Norway, Germany and Sweden.

"And in addition to the above, I beg to refer to the following facts, not only as indicative of the rapid development of the company, but also as affording abundant proof of the speedy advent of that foreign traffic upon which the success of the whole undertaking so much depends:—FIRST, a weekly line of fast Screw Steamers from Liverpool to Quebec in summer, and to Portland in the winter (with which an agreement has been entered into, which will make this Steamship Line, in connection with the Railway, not only the cheapest, but by far the quickest route between Liverpool and all parts of the Canadas and Northern and North-western States of the Union). SECONDLY, an additional line of auxiliary Screw Ships from London to Montreal. THIRDLY, a monthly line of Screws from Liverpool to Portland. FOURTHLY, a proposed new line of screw steamers between Glasgow and Quebec, and lastly, the *Great Eastern Steamship*, which, as it is now generally known, will make her first trip to Portland, in connection with the through-booking arrangements of the Grand Trunk Railway Co.

"In conclusion, I have only to again reiterate my conviction that all past anticipations will still be realized upon the completion of the original scheme in its integrity, and the vast through business attracted to this new and direct channel between the Old and New Worlds."

The President's report says:

"In the report recently issued by the London Directors to the Shareholders, the latter were informed that the Directors, coinciding with the Government of Canada, deemed it of great importance that they should be in possession of a Report from an Engineer of high standing, wholly unconnected with the previous operations of the Company, upon the construction of the railway, the character of the works and the quality of the rolling stock supplied under the contracts. The gentleman appointed for the purpose was Mr. Charles Hutton Gregory, C. E., and after a careful examination of all matters embraced in his instructions during a two months' sojourn in the Province, he has made an elaborate report, a copy of which is now in course of transmission to every shareholder.

"Owing to the restrictions contained in the Relief Act of 1856 with respect to the application of two millions of preference bonds to specific objects, it is necessary to obtain the sanction of the shareholders to raise further capital, and the published notice convening the meeting asks for the concurrence of the shareholders to an increase of the capital by two millions of pounds sterling to meet existing liabilities, and for additional rolling stock, station, and other accommodation, amounting in the aggregate to £1,184,226.

"It is only intended, however, to issue an amount not exceeding £1,500,000, the balance of £500,000 being intended to be in substitution of the C. Debentures created last year, and which will be cancelled.

"The Directors recommend that these Debentures be created on the following terms, viz: that they rank immediately after the existing Debentures of the Company, and bear interest at the rate of seven per cent. per annum, and that one-third be repayable in five years, one-third in ten, and one-third in fifteen years.

"In 1856 an independent company called

the Grand Trunk Junction Railway Company obtained an Act for the construction of a railway from the Grand Trunk line at St. Mary's nine miles west of Stratford to London, a distance of 22 miles: and the Directors of that Company have offered to transfer its right to the Grand Trunk Company at par, and as by means of this short line an important connection will be made with the railways centering at London, it is very desirable that the sanction of the shareholders should be given to the amalgamation of the two companies, and to an agreement which has been made for the construction and equipment of the railway with responsible Canadian contractors—the cost being at the rate of £8,000 per mile, including rolling stock, and which is included in the sum available under the Relief Act of 1856.

"The Act of last session, a copy of which has been already forwarded to each stockholder, having dispensed with the Government Directors, a reorganization of the Board becomes necessary: and it is recommended that the number of Directors be fifteen, ten of whom shall be resident in Canada and five in England. That the order and manner of rotation in the Board shall be decided by ballot, and that five members actually present in Canada, with two London Directors present in person or by proxy, and three members actually present in London, shall be quorums for the Boards.

"At present there are but eight elective Directors in Canada, and it is a recommendation to the meeting of the shareholders in order to make up the required number, that Mr. Bidder, the General Manager, and Mr. Blackwell, recently recommended by the London Board as a Director, be elected Directors.

"The engagement with the Engineer in Chief has expired, and the Directors, in order to maintain the confidence of the English proprietors, have thought it expedient to secure to the Company the services of a gentleman on the Direction who would be willing to devote his whole time to the Company, and while possessing the confidence of the English shareholders, would be enabled to exercise a general supervision over the management of the railway, especially in the Engineering and Financial departments, and would co-operate with the Directors resident in Canada, in the promotion of the general welfare of the undertaking, and this arrangement is submitted for the approval of the shareholders at the present meeting.

"The retiring Directors are the Hon. John Ross, and Messrs. Holmes and Crawford, of the Canada Board, and Messrs. Thos. Baring, M. P., George Carr Glyn, M. P., and K. D. Hodgson, M. P., of the London Board, all of whom are eligible for re-election, and offer themselves for re-election accordingly."

The present condition of the Victoria Bridge is given in the following from the Engineer's Report:

"In my report of 20th August, last year, I stated that by the end of the season, the two abutments and nine piers would be completed, and by the 12th November following, this had been accomplished.

"The progress intended for the present year was limited to seven additional piers, the dams for which were commenced as early in the season as the state of the river, by its freedom from ice, would permit, and to the present time two piers have been completed, and the masonry of two more is now in a forward state.



"The remaining three dams commenced this year are complete, and the masonry will be forthwith commenced, and I have every hope that by the middle of November all these piers will be finished. The time hitherto occupied in completing a pier after the masonry is commenced seldom exceeding six weeks—sometimes only five.

"The iron work for one tube is now in course of erection, and will be finished by the last of November. Material for the second tube is in course of transit from England, and I am advised of the preparation for eight more tubes, to be dispatched early in the ensuing season, so as to reach here in time for erection next year.

"The embanked approach on the north side is made up to its full height and nearly to its full width; that on the south side is in progress and will be brought up above winter water level before the close of the season.

"As regards the future, the requisite measure will be taken during the winter to secure the placement of six dams for the completion of as many piers (including the two central ones) next year, which will leave only two piers to construct in the following year, 1859.

"The erection of the tubes in the meantime will progress rapidly, so as to leave only four to finish after the completion of the two piers in the last mentioned year."

#### NEW ORLEANS & GREAT NORTHERN R. R.

From the last annual report of this company we introduce some condensed statistics showing the importance of the road and its numerous connections, together with its earnings in the last two years.

It will be seen that the freight and passenger earnings for 1855 were \$123,305 34, and for 1856 \$177,639 99, making a difference in favor of last year of \$54,334 65, or about forty-four per cent. This increase, all things considered, is satisfactory; for, although much work has been done on the road within the past year, in the shape of graduation, masonry and bridging, but little has been added to the track. Yet these earnings are insignificant if contrasted with what they will be when the road shall be entirely completed between New Orleans and Canton. The following is an estimate, made up last year, but it is probable that its figures will fall short of the reality:

*Estimated receipts of the New Orleans, Jackson & Great Northern Railroad, when finished to Canton, and before the Mississippi Central Railroad is completed:*

100,000 passengers at \$8 each.....	\$800,000 00
United States mail service.....	41,200 00
50,000 bales of cotton from Jackson and north of Jackson, at \$2 per bale.....	100,000 00
Way and miscellaneous traffic.....	100,000 00
Up freight of merchandise and supplies.....	150,000 00

\$1,191,200 00

Deduct 50 per cent. for expenses.....

595,600 00

Net annual receipts.....\$595,600 00

*The same, after the Central Railroad is finished.*

100,000 passengers at \$8 each.....	\$1,000,000 00
United States mail service.....	41,200 00
100,000 bales of cotton, north of Jackson, \$2 per bale.....	200,000 00
Way and miscellaneous traffic.....	200,000 00
Up freight of merchandise.....	300,000 00

\$2,341,200 00

Deduct 50 per cent. for expenses.....

1,170,600 00

Net annual receipts.....\$1,170,600 00

The various railroads with which the Great Northern will connect are most accurately and clearly described by his Excellency, the Governor of the State, in his recent annual message to your honorable body.

Many of these roads are finished, and every one of those not yet completed is making satisfactory progress in the work of construction. Few are aware of the very little yet remaining to be done to connect New Orleans by railroad with every part of the Union east of the Mississippi. It can scarcely be doubted that in 1859 the traveler will be enabled to go by rail from New Orleans to the remotest part of the country. The Mississippi Central Railroad, with which this connects at Canton, runs in a northerly direction to Lagrange, Tenn., a distance of 188 miles, where it intersects the Memphis & Charleston Railroad. It will be finished in 1858. The Mississippi & Tennessee Central Railroad connects with the Mississippi Central at Lagrange, and runs in a northerly direction to Jackson, Tenn., a distance of 45 miles, there tapping the Mobile & Ohio Railroad. It will be finished within a few months. That part of the Mobile & Ohio Railroad between Jackson, Tenn., and Columbus, Ky., on the Mississippi river, 16 miles south of Cairo, at the mouth of the Ohio river, will be finished by November of the present year. A line of steamboats on the sixteen miles between Columbus and Cairo, to be run by the Illinois Central Railroad Company, will connect the Illinois Central and the Mobile & Ohio Railroads, until the 16 miles of railroad between those two points shall be completed. The distance from Jackson, Tenn., to Cairo is 126 miles, and the total distance from New Orleans to Cairo is 565 miles. The time required to run through will be 23 hours. The time by steamboats is from five to eight days.

The Memphis & Charleston Railroad will be completed in a few months. (Now completed.) It runs from Memphis to Stevenson, on the Nashville & Chattanooga Railroad. By this road and those running from its eastern terminus in a northeasterly direction, all completed except the "East Tennessee & Virginia" and the "Orange & Alexandria" Railroads (and they will be finished in 1858), we have a direct route, entirely by railroad, from New Orleans to New York, 1,318 miles in length, which may be run over at moderate speed in 53 hours.

#### THE NEW YORK CLEARING HOUSE.

Our readers have heard a great deal about the Clearing House in New York since the commencement of the financial crisis. We copy from the *Independent* the following account of the operations of this institution:

What then is a New York clearing house? Only a very simple labor-saving machine. It deals in masses of figures and speedily accomplishes great results, affecting to some extent the monetary interests of the Union, as this city is the great money heart of the country. To many persons it may look complicated, but it is not. The clearing house is the channel through which daily flows the largest part of the active capital of New York. It is, in other words, the medium through which the exchanges of the banks are made and settled. In order to give a clear idea of what it is, some description of the former mode of making exchanges is necessary. Long ago there was but one bank in the city of New York. It was known as "The Bank," and is now known as the Bank of New York, an institution that, though old and venerable, has passed through many a season of commercial trouble, always sustaining a high character and credit since "The Bank" first opened its doors in 1784.

In due course of time other banks were established, each of whom received the bills and checks of the other. This made it necessary for them to exchange and keep stated accounts with each other. These accounts were usually settled once in each week.

This system was continued until the year 1853 when there were fifty-seven banks doing business in the city of New York. In the month of August of that year the banks were required by law to publish a weekly statement of their business. The publication of this statement has been of great service to both the banks and the public. As soon as this law went into operation great efforts were made by the banks to make as strong statements as possible, and to this end they daily drew from each other their balances in coin. This became very laborious, and it occupied most of the time of the principal officers of the bank to attend to the exchanges and settlements with each other, and the porters were kept on the run with exchange or drafts for balance, and coin was carted and carried all over the city day after day, at no small risk; yet when the day's work was ended the banks were no nearer a settlement than when they begun.

This could not continue long in this inventive age. Soon after the weekly statement law went into operation, the association known as the New York Clearing House Association was organized by the banks.

The clearing house room is 110 feet long and 24 feet wide; it contains two counters, one on each side of the room, four feet from the side walls; these are joined by a semi-circle counter at the lower end, and form a continuous counter, which is divided by iron rails into spaces, each one of which is occupied by a bank. The banks are numbered in the scale of age, the oldest being known as No. 1, and the desks are arranged in like numerical order upon the counter. The exchanges are made at 10 o'clock, A. M., at which hour the clerks are called to their stations by the manager—the settling clerks upon the inner side and the specie clerks upon the outer side of the counter.

At a signal given by the manager, precisely at 10 o'clock, the specie clerks move to the desk next on their right, delivering their exchanges to the settling clerks, and receiving upon their statements the initials of the settling clerks in each case, as a receipt for the amount left with them; and thus they pass from desk to desk until they have made the circuit of the counter and returned to their desks, having delivered their exchanges, and having received a receipt for each. The delivery occupies from five to seven minutes, during which the settling clerks have each received and receipted for the entire exchanges sent against their bank. These exchanges are then entered upon their statements, and the amount which they have received ascertained, and the difference between the amounts brought and those received.

On the 11th of October, 1853, the exchanges and settlements were for the first time made at the clearing house by the fifty-two banks which formed the association. Each of these banks sent two clerks to the clearing house; one was termed the settling clerk, the other the specie clerk. The settling clerk brought with him a statement upon which was entered the entire receipts of the bank he represented, of the bills and checks upon each of the other banks, as made up at the close of business of the previous day; also in the second column the amounts



added in each case to the exchanges of the mint receipts of the morning; these two columns were united in a third column, the total of which represented the amount sent to the clearing house for exchange; he also brought a ticket directing the clearing house to credit his bank with such total amount. The fourth column of his statement was blank, upon which was entered the amounts received by him from other banks. The specie clerk brought a statement upon which was entered the amount of the items for each bank brought by him to be exchanged, with a column in blank, headed "Received by." The exchanges were bound together in packages, with a slip upon the top of each, upon which was entered each item inclosed. The footings of these slips, of course, agreed with the amounts entered both upon his statement and that of the settling clerk. The packages were arranged in the order in which they were to be delivered, one for each bank.

This being done, the specie clerks return to their banks with the exchanges, taking a statement of the result of the exchange. The settling clerk then prepares a debit ticket for the clearing house, showing the amount they have received and the resulting balance, either for or against their bank. If their work be correct, the aggregate amounts charged to the banks on the proof sheet of the clearing house will exactly equal the amount credited them, and the balances which have become due to the clearing house from those banks which have received a larger amount of exchanges than they brought, will be equal to the indebtedness of the clearing house to such banks as are credited with a larger amount than they are debited, and then a proof is made. This result has always been obtained, and the difference of a cent cannot be found on the books of the clearing house. In the work of one hundred clerks, who have to enter and add more than one hundred and fifty amounts upon their statements, some errors are of course made, but by rapid and simple methods not necessary to be described, are always found out. The proof being arrived at, the settling clerks return to their banks with the precise result of the exchange. It will be seen that by this process fifty balances are in each case concentrated into one, which is settled daily at one o'clock.

At every annual meeting of the association one of the banks is elected as a special depository. The Bank of America has acted in that capacity since the organization of the association. In that bank the associates deposit such amounts in coin as they choose, for which they receive certificates in sums of five hundred, one thousand, five thousand, and ten thousand dollars, which certify that the Bank of America has received sums from the depositor to be held in trust as a special deposit, payable in coin on presentation, only to the order of the bank presenting the certificate, that bank being a member of the association. Either coin or these certificates are used by the banks for the payment of their balances at the clearing house. The fractional sums less than five hundred dollars are paid in bank notes and coin to the exact amounts due. In like currency the clearing house pays its indebtedness to the creditor banks. The certificates are never endorsed until they are presented at the Bank Association for payment; are never afterwards issued. They save the labor and risk of the transportation of coin to and from the clearing house, and if lost or stolen could not be used, as they only pass from the banks to the clearing house,

and in return to the banks. The Bank of America holds for the association for this purpose about six millions of dollars in coin.

Daily at one o'clock P. M., the specie clerks of the debtor banks pay at the clearing house their balances, receiving the receipts of the manager or his assistant therefor, and at half past one o'clock, the debtor banks having all paid their balances as they are required to do before that time, the specie clerks of the creditor banks receive and receipt for the amounts due them, and at two o'clock P. M. the day's routine of the clearing house ended. The exchanges average per day upwards of twenty-five millions of dollars, and are settled by the payment of an average balance of one million of dollars. For the year ending

Oct. 1st, 1854, the exchanges.....	\$5,750,435,937 06
Oct. 1st, 1855.....	5,467,911,098 38
Oct. 1st, 1856.....	6,906,213,338 38

The proof sheet forms the basis of the books kept at the clearing house, which are so arranged as to show all the transactions of the banks with the clearing house, and from them a very correct estimate of the condition and management of the banks can be found.

These books are only shown to officers of banks belonging to the association. Since the organization of the association four banks have been expelled from the clearing house, their management and unsound condition being clearly indicated by its books. They have all been closed, as banks cannot do business unless they belong to the association, or exchange through some bank that is a member. In the case of the four banks expelled, the result has shown that the estimate formed in each case of their condition was a true one. Two banks have been admitted into the association since its organization, and both of them during the past year. A bank is not admitted until its capital is all paid, nor until after an examination by a committee of the association, they are satisfied that it is in sound condition and prudently conducted. The careful reader will perceive that the direct advantage of the system, such as the economy of time, the closing of twenty-five hundred accounts on bank ledgers, the greater security, &c., important as they must be admitted to be, are but small in comparison with the indirect benefits resulting from this mode of exchanging. By it the banks are made perfectly independent of each other, and regulate their business by the movement of their exchanges through the clearing house, yet all can ascertain the position of their associates day by day, which, under the former system, could not be known.

It also imposes salutary checks upon the banks, preventing unsafe expansions, and compels them to hold at all times a sufficient amount of coin to meet their balances promptly. It has brought the bank officers together, made them acquainted with each other, and promoted a spirit of harmony and united action. The association being voluntary, the restrictions are self-imposed, any bank being free to withdraw from the clearing house at pleasure, upon due notice being given, and all, large and small have an equal voice in its management. The association appoints or elects annually four committees, to whom the government of the association is referred. They consist of a clearing house or executive committee, a committee on admission, a committee on suspensions, and a committee on arbitration; also a chairman and secretary. The business of the clearing house is conducted by a manager, assistant manager, and two clerks. A special police-

man is also employed and stationed at the clearing house. The expenses are small, and are divided among the banks in proportion to their capitals.

#### ILLINOIS CENTRAL RAILROAD.

OFFICE OF ILLINOIS CENTRAL RAILROAD CO., }  
New York, Oct. 20, 1857. }

The Directors of the Illinois Central were compelled to advise its creditors on the 9th inst., of its inability to meet its engagements, owing to the fact that no assets in its possession would command money—this unfortunate position was unexpected and especially painful, in view of the liberal disposition manifested by the shareholders to meet the call of \$10 per share, payable on the 25th of September. The installment on 67,552 of the shares held in this country was paid. The English shareholders were advised, at a meeting held in London on the 10th of September, that the floating debt on the 1st of August, was \$3,700,000, of which two-thirds matured previous to the 1st of January. The parties present responded to the call, intelligence of which reached London; a few days subsequent to the meeting, and they authorized drafts for upwards of £200,000 sterling, but this provision proved unavailing. The domestic exchanges of the country were also equally adverse to the transfer of the funds. The local treasurer in Chicago, had \$133,000, which it was impossible to convert into New York exchange or gold, at any premium. Bonds and securities were useless as collateral, and it was quite evident that any sacrifices made to sustain the credit of the Company, would not accomplish the purpose. \$235,500 Construction Bonds were sold at an average of 85½ per cent., and similar losses were encountered until it was evident that the interests of the proprietors of this enterprise could be preserved only by a general assignment, to prevent any single creditor from attaching portions of the property, and forcing sales at the nominal value which has been attached to any class of property, other than gold, during this depression and panic. The assignment is made to secure the floating debt, only, and ceases when this is paid. Thus the interests of the shareholders are preserved, and they recover possession of their property as soon as they pay their own indebtedness. The value of this investment is not effected by the assignment, but it would be a concealment of the truth if the absent shareholders are not clearly advised that this unprecedented revulsion and check to the industry of the country—and the want of money or exchange to move the abundant crops lying on the prairies, must diminish the revenue from \$400,000 to \$500,000, and although the officers of the company in compliance with orders, have cut off every possible expenditure, and reduced the operative expenses to a minimum point, this can in no way be done in proportion to the diminished revenue. The receipts for 1857 will therefore be at least \$300,000 short of the low estimate made in July, and the net revenue be thus reduced. Estimates of collections in the Land Department may also prove erroneous. The farmer can't pay in wheat or other products, but there exists power under the original deed of trust, to receive pay for land in anything but money or the bonds of the company. It is well to know the extent of the calamity at once, and boldly meet the emergency—we must provide for the payment of the debt incurred in the construction and equipment of this road, before we can get possession of it, and we must preserve the credit and high standing of this Company in the state of Illinois, by incurring no liabilities there, and we should maintain and operate the road by the cash receipts:

Our indebtedness consists of Coupons not presented.....	\$ 158,922 50
Notes payable.....	3,510,915 12
Account payable.....	30713 46

\$3,700,551 98



Against which, we have unavailable assets of \$225,475 70, and assets which are good and available in ordinary times..... 1,841,371 19

\$1,859,179 89

To this we shall now add the Optional Scrip, expiring Jan. 1st..... 794,500 09

Net indebtedness.....\$2,653,679 80

In addition to the above, unless the business operations of this country are resumed at a very early day, we may find our earnings in Illinois insufficient to provide any surplus for the interest which falls due on and prior to April 1, 1858.....\$681,115 00

Less cash receipts estimated from Land Department, applicable to interest Fund..... 180,000 00

\$501,115 00

Add interest on floating debt for six months at 7 per cent. per annum..... 120,519 29

\$630,634 29

Thus, taking the worst view of the case which can occur, the shareholders may have to furnish \$3,284,314.18 or £700,000 sterling. The assignment provided for the payment of the Coupons, notes with collateral security, and notes endorsed by the Directors—these classes of claims amount to \$572,500. Several of the general creditors of the company expressed a desire to have the notes held by them, renewed for six months, and the Treasurer has issued a notice to this effect. This will unquestionably be availed of to a large extent, and defer the payment of two millions of the indebtedness.

W. H. OSBORN, President.

#### ASSETS AND LIABILITIES, OCTOBER 15TH, 1857.

##### Liabilities.

Coupons, Oct. 1, 1857, 7 per cent.....\$ 154,092 60  
Free Land Bonds..... 4,830 50  
Notes payable, maturing prior to Jan. 1st 1858, 2,594,312 95  
Maturing Jan. 1st, 1858, to June 1st, 1858, 823,762 29  
Do. subsequent to June 1st, 1858, 92,829 67  
Interest dividends unclaimed..... 3,213 04  
Sundry accounts payable..... 27,500 42

\$3,700,551 07

##### Assets.

Cash in hands of assignees.....\$51,251 59  
Bills receivable, good.....185,631 41  
1,044 shares stock, owned by company at 80..... 28,920 00  
150,000 Ohio and Miss. Railroad bonds guaranteed by personal security at 60½.....100,000 00  
Bonds, (which will be required by land department at par within 4 months.)  
Construct'n bds. at 7 per cent.....\$344,500 00  
Do. at 6 per cent..... 7,000 00  
Free land b'ds..... 28,000 00 379,500 00  
Balance in hands of London bankers, excess of drafts upon them against instalments authorized to be drawn for.....186,613 67  
Instalments remaining unpaid (called Sept. 25, of 10 per cent.) on 47,869½ shares.....478,695 00  
500,000 Peoria & Oquawka 8 per cent. bonds at 80.....400,000 00  
Accounts receivable..... 29,877 62  
Insurance scrip \$17,765 at 50. 8,882 50 1,841,371 19

\$1,859,179 88

Optional Right scrip expiring Jan. 15th, 1858..... 794,500 00  
\$2,653,679 88

##### Coupons.

Falling due prior to July 1st, 1858, on bonds and optional right scrip.....681,115 00

##### Less.

Cash receipts estimated from Land Department, applicable to Interest Fund.....180,000 00  
501,115 00

To which add interest on floating debt for six months at 7 per cent.....120,519 29 630,634 29

Total liabilities to July 1858.....\$3,284,314 17  
172,000 Ohio and Miss. bonds at 50 86,000 00  
640 shares Naugatuck R. R. stock at 80.....51,200 00  
Bills receivable, secured by the stock of the company, at par.....88,275 70  
\$225,475 70

#### MONETARY AND COMMERCIAL

The past has been the most trying week of the revolution. The heavy payments of the 1st and 4th of November, the payment of the interest coupons of several largely indebted railroads, and the general distrust, contributed to render this week one of the most difficult that our business community has yet passed through. The prospects are, however, brighter. The payments of the 1st and 4th are over; the railroads are no longer harrassed; business houses are no longer adding to their liabilities; contraction and settling up is the order of the day, and we shall soon begin anew, with greatly decreased liabilities, contracted business, and a sound state of affairs. The produce of the country has hardly yet begun to move. When our enormous crops go forward to the seaboard, and are used in payment of our foreign indebtedness, it must produce relief.

Exchange on New York, which has been extremely scarce, is more abundant. Gold commands a premium of 3 to 4 per cent. Uncurrent funds, such as Illinois and Indiana bank notes, which have been selling at 90 to 93, are now sought after at 95, 97 and 98, to pay for produce. It is quite probable that they will soon be at par. Kentucky currency is scarce; so also that of the New Orleans old banks.

In the general markets we notice an upward tendency in produce. Flour, which has sold as low as \$3.80 to 3.90, is quoted at \$4.25 to 4.35; Barley at 60 to 65c.; Pork at about \$5 per 100 lbs. The exports of domestic produce from New York for the week was \$1,364,553. The total export of specie was \$116,454 82. The principal feature in the stock market is the abundance of State bonds thrown on the New York market. These bonds have been deposited as security for bank circulation, and during the contraction are not needed for that purpose.

We subjoin our usual quotations from Hewson & Holmes' circular:

Within the last week there has been a decided improvement in the feeling of the money market. Gold, after having sold as high as 10 per cent. premium immediately after the suspension of the New York banks, has steadily declined to 4 per cent. Exchange on New York is also in better supply at 5 per cent. premium, which is now the extreme rate at which it can be sold.

A more active and general demand has sprung up, at slightly better prices, for flour and grain. The pork season is also opening with a more active demand than could reasonably have been expected two weeks since. It is now believed, in well informed circles, that there will be ample funds here from abroad to buy at fair prices all the hogs that will be brought to this market. These facts have created a more cheerful and hopeful tone in commercial circles, and infused more activity in business. Money is, however, exceedingly scarce, and discounts out of the question; but the creation of confidence, even in a slight degree, is daily unlocking small amounts of money which have been hid away since the commencement of the revulsion; if therefore, we can pass along for a few days without any additional disasters, we may look for more decided relief in all departments of trade.

In stocks the business has necessarily been small, but in the last few days we have had a more extended inquiry for first class railroad securities. These inquiries are in some instances from parties who ten days since could

not be induced to entertain an offer at exceedingly low prices for our best securities. In the last three or four days we have effected sales of Little Miami 6 per cent. bonds at 75; Hamilton & Dayton 2d mortgage 7s at 75; Covington & Lexington 2d mortgages at 55; Ohio & Mississippi 2d mortgages at 40. Also, 100 shares Little Miami stock at 75; 30 of Hamilton & Dayton at 50; and 106 shares Farmers' Bank of Ky. at par. These sales indicate a more healthy and confident tone than our market has exhibited for several weeks. Thus far, other securities than those named are without demand; but, as confidence increases, we expect other securities will be called for, to which, in the absence of actual transactions, we are unable to extend our quotations.

#### SALES AT THE NEW YORK STOCK BOARD—Oct. 31.

\$1,000 N. Y. State 6s, 73½	101½
7,500 N. Y. State 6s, 75	100½
3,000 Ohio State 6s, 76	94
3,000 Virginia 6s	79
15,000 Missouri 6s	69
1,000 California State 7s, 1870	57
1,000 N. Y. Central 6s	80
500 N. Y. Central 7s	90
1,000 Illinois Central R. R. Bonds	69
4,000 La Crosse & Mil. Land Grant Bonds	20
1,000 La Crosse & Mil. 1st mort. Bonds	25
210 shares New York Central	64½
70 " Pacific Mail St. Co.	75
25 " Del. & H. C. Company	94½
50 " Cumberland Coal Co.	6½
250 " Erie R. R.	12
100 " Reading	30½
5 " Mich. S. & N. Ind.	11½
26 " do do do pref.	24½
200 " Panama	71½
80 " Illinois Central	81
5 " Galena & Chicago	65
350 " Cleveland & Toledo	27½
20 " Chicago & Rock Island	67
18 " Milwaukee & Miss.	19½
40 " La Crosse & Milwaukee	6
25 " New Jersey R. R.	107

## ALLEN & NOYES'

### METALLIC PACKING.

#### To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

### WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8 ly 119 Walnut st., Odd Fellows' Building

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

**D. M. CARHART,**  
TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,  
Respectfully Yours,

D. M. CARHART,  
Oct29-6m Box 1831, Cleveland, Ohio.



## WAREHOUSE

No. 5 FRONT STREET,  
Opposite Public Landing,  
Cincinnati, O.

## PORTER, ROLFE &amp; SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."

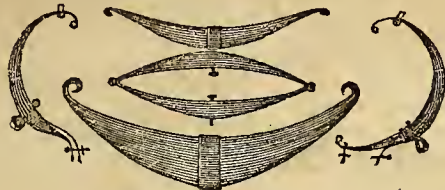
We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

M<sup>C</sup>DANIEL & HORNER,

LOCO- AND CAR  
MOTIVE SPRING



## MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

## References.

NORRIS BROTHER'S, Locomotive Builders, Philad.  
A. C. GRAY, Prest. New Castle Manuf. Co.  
U. WELLS, R. R. Car Manuf. Petersburg, Va.  
I. R. TRIMBLE, Supt. Philad. R. R. Co.  
May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.  
EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.  
THOMAS DOUGHERTY, Master Mach. do.  
THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

ALBERT M. LEA,  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

## New Works on Civil Engineering.

THE Field Practice of Laying out Circular Curve for Railroads. By John C. Trautwine, Civil Engineer. 4th Thousand, in pocket-book form with tucks.

—ALSO—

A New Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Tables and 10 Engraved Plates of Diagrams. By John C. Trautwine, C. E.; 2d edition.

Price, one dollar each. Postage on the Curves, five cents; on the Excavations and Embankments, eight cents. For sale by WILLIAM HAMILTON.

Hall of the Franklin Institute,  
Philadelphia, Pa.

Sept. 21-3\*

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,  
Wilmington - - - - - Delaware.

MANUFACTURERS OF

## CHILLED WHEELS

AND

## TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,  
EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Harlan & Hollingsworth,  
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

oc2

## Union Works, Baltimore.

## POOLE &amp; HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

## Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati

J. T. CRAPSEY,  
ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

SCHENECTADY  
Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

## LOCOMOTIVE ENGINES,

AND TENDERS, AND

## RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Au16.1y



**GENERAL  
RAILWAY SUPPLY AGENCY.  
SNOOK & HILL'S PATENT  
LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap:3 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**

**Mechanical Engineer,**

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 26 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

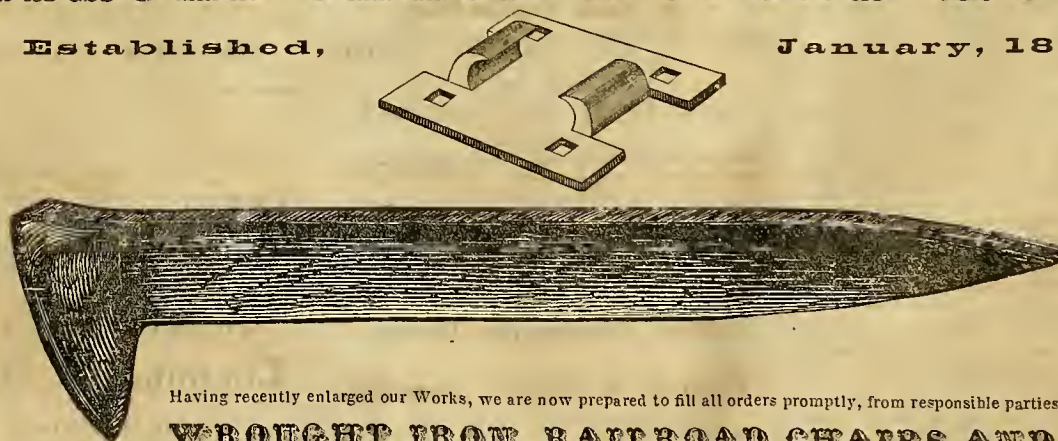
Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. nc23

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3rd: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, and can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK,

July 10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

Feb 7

LEE &amp; LEAVITT.

1856.

## LITTLE MIAMI

AND COLUMBUS AND XENIA



EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING,

PITTSBURGH,

DUNKIRK,

BUFFALO

NIAGARA FALLS,

To all the Eastern Cities.

Lightning Express through to Columbus, Crestline, and Cleveland, without change of cars.

## TIME FROM CINCINNATI

To Columbus in.....	4 hours
To Cleveland in.....	8½ "
To Dunkirk in.....	14½ "
To Buffalo in.....	16 "
To Albany in.....	26 "
To New York in.....	31 "
To Boston in.....	35 "
To Crestline in.....	6 "
To Pittsburgh in.....	14 "
To Philadelphia in.....	31 "
To Wheeling in.....	10 "
To Baltimore in.....	28 "
To Washington in.....	29 "
To Steubenville in.....	1 "

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities.

Also, Detroit, via Cleveland, Springfield, Wilmington, Circleville, Lancaster, Zanesville and the East; Chillicothe and Athens. Passengers by this train for Lake Steamers have the afternoon at Cleveland. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland, Pittsburgh and Wheeling Express Mail, leaves Cincinnati at 10 o'clock A. M., for all the Eastern cities. Passengers by this train for Lake Steamers make direct connection. This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 3:30 o'clock P. M., for Springfield, Wilmington, Circleville, Lancaster and Zanesville; Chillicothe and Hillsborough. This train stops at all points between Cincinnati and Springfield.

FOURTH TRAIN.—Cleveland, and Pittsburgh Night Express, leaves Cincinnati at 6 P. M., via Cleveland, and Pittsburgh, for all the Eastern cities. This train stops at all points between Cincinnati and Columbus.

One Train on SUNDAY, at 2:30 o'clock P. M. for Columbus.

Trains run by Columbus time—7 minutes faster than Cincinnati.

## FOR THROUGH TICKETS.

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House, second door West of Vine street; No. 177 Gibson House Building, and Old Office, southeast corner of Broadway and Front streets, opposite Spencer House, or at the Eastern Depot, East Front street.

P. W. STRADER, General Agent

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

July 7

H. B. RUGGLES, Conductor.

## TO LOUISVILLE

## IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE.—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS.—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA.—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Om nibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Om nibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Clin. and St. Louis Om nibus L

Office No. 2 Burnet House.

1856.

1857.

Summer Arrangement.

1857.

Cincinnati, Hamilton & Dayton  
[TRUNK LINE.]

## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPORT,  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time); 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Philadelphia, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:33 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Port Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and sapper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL PLACES AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 109 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

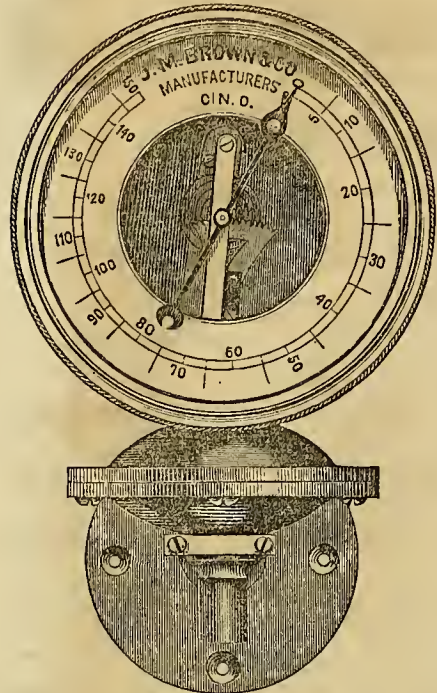
D. McLAREN, Superintendent.

The Om nibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent;



**J. M. BROWN & CO.,**  
MANUFACTURERS OF



**IMPROVED**  
**Corrugated Steel Spring Gauges,**

FOR  
**LOCOMOTIVES AND STATIONARY ENGINES.**

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



**Prosser's Patent**  
**LAP-WELDED**  
**IRON BOILER TUBES,**

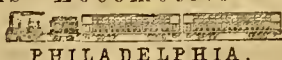
every article necessary to  
**DRILL THE TUBE-PLATES**

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c. Fall Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
63 PLATT STREET, New York.

**Norris' Locomotive Works.**



**PHILADELPHIA.**  
ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.  
**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
RICHARD NORRIS & SON.

**IRON BOILER FLUES**  
**PASCAL IRON WORKS.**

**MORRIS, TASKER & CO.,**  
Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length, as required.  
**WROUGHT IRON WELDED TUBES.**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc  
**Warehouse, 85 South Third St.,**  
**PHILADELPHIA.**

**RAILROAD IRON.**  
**LOCOMOTIVES.**  
4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard 1,000 tons rails 55 lbs. per yard. Also; several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by  
**A. H. GOODMAN & CO.,**  
Feb 7, '56-2m.1 no. 7 Wall st. N.

**RAILROAD CAR**  
AND

**COACH TRIMMINGS.**  
**DOREMUS & NIXON**  
No 21 Park Place, and 18 Murray st.,  
**NEW YORK,**  
**IMPORTERS**

OF  
**Plain and Figured Mohair Plush**  
Printed & Unrent do., Entirely New Designs;  
**MOQUETTES & VELVET CARPETS;**  
**Emameled Cloth, for seats & backs of Cars**  
**ROPE MATTING, Every Width.**  
**Oil Cloths for Head Linings, Enameled with Gold and Silver;**  
**DUCK CANVASS FOR CAR ROOFS;**  
**Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;**

**PATENT FELT.**  
**FOR CUSHION & MATTRASS FILLING**  
N. B. We have the Plush in bond for exportation  
sept 18 **DOREMUS & NIXON**

**W. G. ATKINSON,**  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.  
**RAILROAD** routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists  
Mines explored, new Works laid off, and Geological maps prepared.

**The Kentucky Military Institute.**

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty  
The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

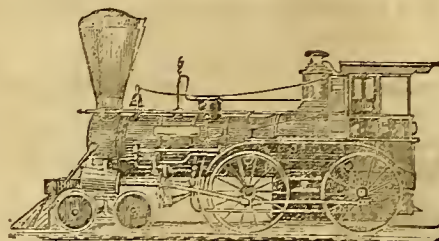
The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

**P. DUDLEY,**  
President of the Board.

Aug 14 1y

**CINCINNATI**  
**LOCOMOTIVE WORKS.**



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 **MOORE & RICHARDSON.**

**Railroad Car Findings**

**BRIDGES & BROTHER,**  
64 Courtlandt Street, New York.  
**Wheels & Axles, Jaws Boxes, and Casting Fitted**  
**Wrought Nuts, Bolts, & Washers,**  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS**  
From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**  
**Plush and Curled Hair.**

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**  
Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

**ALBERT BRIDGES,**  
Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.  
**ALFRED BRIDGES,**  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
†oc6.

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,  
**CINCINNATI, O.**

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND  
**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

**SILVER MEDAL.** (The highest prize) awarded to be seen at the International Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING.....NOVEMBER 12, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS PER ANNUM, IN ADVANCE.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	50 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to

WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 33.

#### EDITORIAL.

A Word to Printers .....	589
Improvements in the Arts of Locomotion—Steam Vessels .....	589

#### RAILROADS.

Evansville & Crawfordsville R. R. ....	590
LaCrosse & Milwaukee R. R. ....	590
Pennsylvania R. R. ....	595

#### MISCELLANEOUS.

Decision in the N. A. & S. R. R. Case .....	590
How to Reform our Railroad Management .....	591
English Railways—What they have Cost, and what they may Earn, and how .....	591
Researches upon the Influence of Sulphur upon Iron, and that of Phosphorus in Partially Neutralizing the Action of the Sulphur; by M. Janoyer .....	593
Lane & Bodley's Power Mortiser .....	594

#### MONEY AND STOCKS.

Sales at the New York Stock Board .....	595
Monetary and Commercial .....	595

A WORD TO PRINTERS.—On another page will be found the advertisement of LAY & BROTHER, Manufacturers of Printers' Inks, about whose Inks we desire to say a word or two, by way of commendation. We have used their News, Book and Colored Inks in our office constantly during the past three years. We find their Inks, in quality, equal to those of any other manufacturer, and in many respects superior. Messrs. Lay & Brother keep for sale in this city a good assortment of their Inks, and, as will be seen by the advertisement, have it for sale in other Western cities, thereby offering to printers great facilities in getting their Ink. Give them a call, or send your orders to be filled, and you will find them prompt in their supplies and reasonable in their prices.

### IMPROVEMENTS IN THE ARTS OF LOCOMOTION—STEAM VESSELS.

When we look at the progress made in the Arts of Locomotion since the time of the old Romans, we cannot believe that (rapid as are our railroad cars) the *ultimate* of locomotion has yet been attained. In looking at the actual increase of power and velocity in locomotion, we shall find that the progress has been about equal on both land and water. At first sight it seems that the railroad was a greater advance than any made in water conveyance; but it is not. The old Roman roads were better than ours; and the advance from a carriage conveyance on them to our railroad cars is no greater than the advance from the Roman and Greek slow, unwieldy-oared galleys to such steamships as those of the Cunard and Collins lines. The land and the water stand about equal as to the Arts of Locomotion; hence we are quite as likely to find an improvement in movements upon the water as upon the land. Such was the idea of the Swedish captain (Ericsson) who invented the hot air engine. But, may it not be that the improvement in water carriage is to be made not so much in the machinery as in the vessel itself? The advance in the art of water navigation, from the Roman galley to the American packet-ship was greater than that from the packet to the steamship; yet that advance was made almost entirely in the art of ship-building.

In looking at this subject, let us look at the relative advantages and disadvantages of land and water carriage.

1. We observe in both cases that which makes it expensive and difficult, and which alone limits the possibility of an hundred miles an hour as readily as ten, is the *resistance* and *friction* of the *material*, on which the vessel or carriage moves.

2. It is equally clear that the resistance of *water* (a fluid) is almost nothing in comparison with that of *land* (a solid). Hence, it is evident that if the locomotive machine, whatever it may be, could move *over* or *on* the water, as it does on the land, the velocity of the water carriage would be incomparably the greatest.

3. It is plain, then, that the improvement of water carriage must depend mainly on the shape and bulk of the vessel. It is the *resistance* of the water through which the vessel moves, and the *displacement* of it by the bulk of the vessel, which makes the sole impediments to extreme velocity. The improvements made in modern packet-ships are made almost entirely by so changing the *form* and *model* of the vessel, that she meets with less resistance, and displaces less water. Could these impediments be still farther reduced, the velocity of the vessel would be still farther increased. This is the object of a new invention, or rather plan, of which an account is given in the *London Post*.

There is building at Southwark, England, a small steam vessel, of iron, which the builders believe will average *twenty-five miles an hour*. Should this be the case, the voyage from England to America may be made *in five days*! We place no implicit confidence in such statements. The result can only be known by experiment. The matter, however, is curious and important enough to excite curiosity as to the *principle* upon which this improvement is supposed to depend. In the first place, the vessel is only intended as a passenger vessel, for speed only. This arises necessarily from the nature of the vessel, which is thus stated in the *London Post*:

"The novelty of the invention consists for the most part in constructing the vessel so that the center of gravity is placed below the water line. This is effected by constructing a chamber, called a "well," all along the bottom of the vessel, in which the machinery, coals and stores can be deposited. As it is not proposed that the vessel shall carry cargo, the centre of gravity will thus become a suspended instead of a supported body; and it is believed that this peculiar formation will materially decrease the area of resistance to the water."

We should not, at first sight, suppose this contrivance would produce much practical effect, but experiments have been made which support the theory, and there are other improvements of equal importance said to be made. The *Post* says:

"The improvements proposed to be carried out may be shortly described as follows: 1. Vessels built according to this plan show a decrease in the area of resistance to the water full 35 per cent. when measured against any other vessel of the same breadth of beam and draught of water, thus insuring greater speed. 2. They have a better disposition of the center of gravity, a consequent increase in stability, and a decrease in the amount of oscillation, enabling them, when required, to carry a larger quantity of canvas than other vessels of the same size. 3. The engines are so constructed as to effect economy in space and weight, causing also a saving of coals equal to a sixth of the consumption of other marine engines. 4. The screw-propeller possesses greater power of propulsion than any other propeller yet introduced, by at least 30 per cent. 5. Attached to the engines is a powerful signal whistle, so constructed as to give out a code of signals, by which captains of ships may communicate with each other, by sounds perfectly intelligible, at a distance of three or four miles apart. The object of this portion of the invention is to prevent collisions at sea during dark nights or foggy weather. The novelty in the steam-propeller is confined to the manner of fixing the fans, so that each blade, when revolving, will clear the other of back-water. This adaptation seems extremely simple. The introduction of a buoyant drum or boss, in which the root of the fan is fixed, also reduces the weight of the shaft by about two thirds. The trial vessel, which will be ready for launching in a few days, is of 60 tons burthen, and when fitted with her engines and stores will weigh only 14 tons. She is formed of plate-iron one-eighth of an inch thick, with angle irons an inch and a half thick, and ribs 15 inches



apart. The inventor proposes to take her to New York when finished."

The inventors of this vessel have gone rightly to work. They have embraced in it all the improvements which they think can be practically useful. If the improvement in the propellers be as great as they state, the vessel will undoubtedly move with greater velocity than any one heretofore tried. We shall wait, with great curiosity, the result of this experiment. If it should turn out that a water vessel can be made to go even *twenty* miles an hour, it will far exceed in velocity any which now cross the ocean, and be fully equal on the water to railroads on land. Passenger cars now only average about 22 miles an hour, and it is certainly possible that steam vessels may come up to this. Ericsson made a great mistake in the attempt to introduce *hot air* instead of steam; but, in the model of vessels and the application of power, there is room for great improvements.

LA CROSSE & MILWAUKEE R. R.—The following gentlemen have been elected directors of this Company for the ensuing year:

Hon. Stephen Clark, President, Albany, N. Y.

Eli Perry, D. V. N. Radcliffe, Artemas Fish, Albany, N. Y.; Jas. A. Brewster, Dav. E. Wheeler, Alfred Noxon, New York city; Byron Kilbourn, H. L. Palmer, Jackson Hadley, E. H. Goodrich, M. M. Strong, Moses Kneeland, Milwaukee.

DECISION IN THE N. A. & S. R. R. CASE.—Judge McLean recently rendered the following decision in the cause of *Williamson vs. the N. A. & S. R. R.*:

1st. That a receiver need not be appointed simply because there was a default in the payment of interest upon the bonds of the Company. The law abhors a forfeiture, and would never enforce one. 2dly. The fact that the Company had paid all the net earnings (saving the usual surplus) to liquidate its floating debt, did not justify the Court in holding that this was a misapplication of the earnings, for if that debt was contracted to finish the road, or to relay the track, then it was beneficial to the bondholders and all concerned. 3dly. That the Court would not take the road out of the hands of the present managers, for it was apparent that they had managed the road with fidelity and integrity. This Court then made an order, directing that in future the net earnings of the road should be applied in equal proportions to the payment of the floating debt and the interest upon bonds.

PENNSYLVANIA RAILROAD Co.—MONTHLY STATEMENT.—Receipts of the road for the month

Ending September 30 .....	\$498,546 90
Same month last year .....	415,649 98
Increase .....	\$82,896 92
Receipts from Jan. 1, 1857, to Oct. 1, 1857 .....	\$3,866,133 93
Same period last year .....	3,631,928 81
Increase .....	\$234,205 12

## Railroads.

### EVANSVILLE & CRAWFORDSVILLE R. R.—THIRD ANNUAL REPORT.

Below we give a few extracts from the Report of this company, and although the facts presented are not of an extraordinary nature, we place them on record as matters of history and reference:

"The operations and business of your road during the past year presents no subject of extraordinary interest to you or to the public, having been characterized by regularity, harmony, and freedom from serious accident in every department.

"Its administration has not been disturbed by consequence of any affliction, accident, or disaster. No passenger upon our trains has been hurt, and no person connected with the road has received permanent injury upon it during the year. The casualties affecting our property have been few and unimportant, and all pecuniary engagements have been promptly met.

"The general condition of our road and machinery is good. Since our last report we have taken out the longitudinal timbers upon which the rails were laid from about 13 miles of the track between Evansville and Princeton (the same being much decayed), and substituted in their place oak cross-ties, and have rebuilt several small bridges and culverts with timber, the decayed condition of the old ones requiring it. Before winter the track between Evansville and Princeton, for the whole distance, will be completed with cross-ties. During the ensuing year the greatest portion of the remaining longitudinal timbers, being between Princeton and White river, a distance of twelve miles, will need to be taken out and cross-ties laid in their place; and, also, a considerable expenditure will be required on bridges and trestles.

"When these improvements are accomplished it may be truly asserted that the roadway of this company is equal in point of quality and character to any in the country depending on timber structures.

"Since our last report a permanent engine house has been completed at Terre Haute at a cost of \$12,201 65, furnished at that point for the purpose. A temporary wooden structure for the storage of engines was erected at Vincennes, costing \$444 40, which was unfortunately burned early in the spring, and in it a valuable engine, which, fortunately, was not ruined, but received only partial injury, and has since been repaired.

"Adding to these items the cost of a wood-house and some outlay for water supply, we have all the subjects of special expense on the road-way since the commencement of the last year.

"No further equipment in machinery or cars has been purchased, and none will be re-

quired. By keeping up the good condition of that now owned by the company, by timely repairs and renewals of failing parts, with our necessary shop force, this road can be operated several years without further purchases.

"During the year our floating debt has been reduced \$87,686 75, and it now amounts to the sum of \$51,771 90. It will be perceived from this that no increase of our liabilities has been made by any purchases of equipment or otherwise since the publication of our last report.

"The gross receipts of the road for twelve months, from 1st of September, 1856, to 1st of September, 1857, were \$249,867 63. Its expenses—including the re-laying of some thirteen miles of track, and re-construction of divers bridges and culverts—were \$125,727 39, leaving net receipts \$124,140 24.

"A comparison of the statements of expenses for the former year with that of the year just passed, as exhibited in the schedules of our Secretary and Treasurer, shows an increase in the latter over the former year of \$17,819 07.

"Some seven miles more of the longitudinal timbers have been taken out and replaced with cross-ties during the past than the year before, and also about \$2,500 more expended in repair of decayed bridges and culverts.

"It is a common method of testing the economy with which a road is managed to compare the year's expenses with its gross earnings. The per centage of the one to the other, as between different roads, is supposed to determine the relative economy of management.

"Nothing can be more absurd than this comparison—that a long road with a light business can be operated with as small a per centage of expenses to gross receipts as a short road, would only be expected by a person who has given the subject no consideration.

"If the business of a road can be supposed to be so light that its whole earnings would be required for its maintenance, we would have a case in which no such comparison could be made, and yet the highest economy might characterize its management.

"The vast store of agricultural production, the yield of the harvest just passed, to be moved away to market during the ensuing year, will largely increase the business and earnings of your road by freight transportation. This may be relied upon, and furnishes a very encouraging consideration.

"A packet line upon the river, recently established, and running in connection with your road semi-weekly, between Evansville and Paducah, promises a permanent and growing contribution to its business. It is believed that the increasing business of this packet will soon lead to the establishment of a daily line.



"On the Rockville division of this road nothing has been done during the past year for want of the means necessary to carry it through. The Directors trust and hope that the time may come soon when this desirable link will be added.

"The total cost of road and equipment has been increased during the year to \$2,158,723 06 (or \$19,803 per mile).

"The funded debt has been increased \$115,390—\$75,000 by sale of first mortgage bonds on hand at close of last year, and \$40,300 of second mortgage bonds. The proceeds of the sales have been applied to the payment of floating debt, arrears of interest, and commission. The floating debt now amounts to \$51,771 90—\$87,696 75 having been paid off during the year.

"The earnings from transportation show an increase of \$5,897 21 over last year."

#### HOW TO REFORM OUR RAILROAD MANAGEMENT.

To the Editor of the AM. R. R. JOURNAL.

LONDON, Oct. 6, 1857.

SIR.—There are so many points of resemblance between England and the United States, that cases must constantly occur in which the experience of the one country may be made useful in the practice of the other. At this moment the condition of your great railroad interests in the United States—the panic, the distrust, the ruinous fall in prices,—finds to a great extent its parallel in the state of things which prevailed in England 8 or 10 years ago, when disappointment took the place of exaggerated expectations, and a blind and unreasoning confidence gave way to equally irrational distrust, and one or two cases of moral delinquency led to the doubt whether ordinary honor and probity existed amongst the race of railway directors and officials.

It may be useful to review, 1st, what course was pursued under those circumstances, and 2nd, what has been its result.

First—The course pursued, notwithstanding stormy meetings and excited language, ended in the display of good practical commonsense on the part of both directors and proprietors of railways. The proprietors thought that they had not been sufficiently informed or consulted in regard to the condition and conduct of their affairs, and they sought for the future, further information, they demanded not only the truth, but the *whole* truth, and they suggested the means whereby this might be secured. The directors instead hesitating or objecting on any ground of punctilio, or inconvenience, admitted at once the reasonableness of the requirements, and acquiesced in the demands with a good grace, and sought to meet the fullest inquiry, and the course now universally established in all English railway companies is as follows:

1. Meetings of the proprietors are held on due notice according to law, *twice* every year.

2. Reports with full financial statements are prepared for these meetings every 6 months, and are delivered to each proprietor 7 days prior to the meeting that he may have full opportunity for examination, inquiry and consideration before he gives his vote, accepting or rejecting the report or any part of it.

3. To insure perfect truthfulness and accuracy in all the financial statements, the proprietors appoint from amongst themselves two auditors (one to be elected annually) with power to examine thoroughly all the accounts

of the company in the most minute detail, and to engage such professional assistance as they may find necessary, independently of the board of directors—the auditors are paid for their trouble, and issue their report every half year, with that of the directors, pointing out any matter in which they differ from the directors, and stating the grounds of difference if any. This audit is not a matter of mere form, taken up at the close of the half year, but is continuous throughout the half year, at the discretion and convenience of the auditors, who hold themselves responsible for the correctness of their reports.

4. Any newly proposed work, engagement, or outlay of any kind must be submitted to the proprietors with an estimate of cost, and is subject to their approval or otherwise, before any expenditure is incurred.

5. The earnings of every railway are published weekly in the newspapers.

6. It may be remarked that a half-yearly railway meeting in England is not allowed to pass as a matter of course; every point connected with the business or policy of the company is considered a fair subject for discussion, and on these occasions the worst that can be said, ordinarily is said, with the utmost freedom, and there is never wanting a number of malcontents to put the ruling powers on their defence. A printed report of the resolutions of such meetings, with the declaration of the dividend, the questions asked the explanations given, is afterwards sent to every proprietor; with these means placed in their hands, and with these precautions to secure faithful reports, it is the fault now of the proprietor himself if he fails to be well acquainted with the condition of his own property.

We now arrive at the second branch of the inquiry: What has been the result of the plans thus adopted?

The result has of course not been to enable companies to overcome the natural consequences of ill-considered projects, of too costly an outlay, or of the damaging effects of unforeseen competition, and there is still occasional grumbling at the smallness of the dividends, but the good accomplished is real and substantial; it has satisfied the proprietors that they now know the truth, that dividends when paid have really been earned, and that engagements are not entered into without their knowledge and consent. The public also has gradually acquired confidence, and all classes have become steady investors, and none but insignificant amounts of stock are in the hands of speculators; prices, therefore, are subject to comparatively little fluctuation, and that depending chiefly on the varying market rate of interest. A proof of this settled confidence may be found in the fact that all stocks paying the *same* rate of dividend bear as nearly as possible the same market price, and the market price of all others is very closely proportioned to the dividend paid. Railway shares paying a dividend of 5 per cent. per annum, have generally for the past 3 or 4 years averaged par—varying from a little more to a little less. Many of the stocks which fell in the panic some years since to 50 per cent. discount, now average par. Railway property has thus at last acquired a stable position and is as little fluctuating as any other in value.

The same course steadily pursued with you would almost certainly work out the same valuable result—short reckonings, reports and accounts presented half-yearly, and these

sifted by independent auditors, half-yearly meetings of proprietors with full opportunity for discussion, in short, complete openness and publicity, these are the only means by which confidence can be acquired and established, and until this is done, and until the public can regard railway stock as an object of prudent investment, there is little prospect that any settled improvement can be sustained. It remains to be seen whether the proprietors in the United States will wisely exercise the power which belongs to them of enforcing from railway boards a better system. The public has had from your Journal for years past, the voice of warning repeated from time to time, you have faithfully pointed out on numerous occasions, cases of careless, abusive or unsatisfactory accounts, it is to be regretted that these warnings have hitherto failed to arouse proprietors to their danger,—in the day of calamity they may be more disposed to listen. The importance of the subject must be my excuse for the length of this communication.

I am, sir, Your obt. servant,

A PROPRIETOR OF AMERICAN RAILWAY STOCK.

P. S.—There are numerous railroad companies whose stock is almost altogether owned in New York, Boston, or the East, but whose lines lie in the Western States, and whose annual meetings are held at Detroit, Chicago, or elsewhere, where not one in fifty of the proprietors can attend, and the meeting becomes a mere form, why should not the proprietors in all such cases require that another meeting 6 months afterwards with reports and accounts for 6 months be held at New York, Boston, or wherever most convenient in the East, when they might have the opportunity of publicly discussing all questions of interest with the directors? The plan would be beneficial to directors as well as proprietors; it is well that both should meet face to face.

[From the London Economist.]

#### ENGLISH RAILWAYS—WHAT THEY HAVE COST, AND WHAT THEY MAY EARN, AND HOW.

The Annual Report, prepared by Captain Galt, of the Railway Department of the Board of Trade, serves conveniently to bring before the public the more general features of the railway system of the United Kingdom.

The document itself is formal and business-like, and is marked by some details of improvement as compared with the reports of former years. But there is still room for amendment, especially in the arrangement and style of printing of nearly all the elaborate and valuable tables which constitute the appendix of the report. These tables contain details which are not to be found elsewhere; but at present the number of columns is so numerous, and the type employed is so small, that for most practical purposes the information might as well have remained in manuscript. The tables could be easily constructed in divisions of less extent, so as to admit of being printed in type fairly legible; and this is an improvement so obvious that we make no doubt but that the intelligent officer immediately responsible for the publication will take care that no mechanical defects shall render his labors less valuable in future.

On the 31st of December, 1856, the 8,506 miles of railway in the United Kingdom had actually cost in money 309 millions sterling; and that large sum had been obtained as follows, viz:



	Millions Sterling.
Ordinary shares.....	174
Preference shares.....	57
	231
Loans raised.....	78
	309

The average rate of interest paid on the preference share capital was £5 13s. per cent. per annum; on the loans raised, that is on debenture debt, £4 13s. per cent. per annum; and on the ordinary share capital, £3 2s. 6d. per cent. per annum.

The total gross receipts of the railways of the United Kingdom in 1856 was twenty-three millions sterling, or something approaching the interest of the national debt.

We are now rapidly approaching the end of our era of railway making. It has been going on for twenty years with amazing vigor, and it has covered these islands with a system of public roads which, for extent, perfection, utility, and rapidity of execution, leave far behind the achievements of any other people or any other age in the same space of time.

But there are other results connected with these public works, quite as astonishing as either their utility or their extent.

At the end of the last year the 174 millions of ordinary share capital paid an average dividend of no more than £3 2s. 6d. per cent. per annum, and that £3 2s. 6d. was a higher rate than had prevailed during any (except one) of the preceding seven years. At the close of 1849 the 158 millions of ordinary capital yielded only £1 17s. per cent. per annum, and the rate remained at less than 3 per cent. per annum until 1853. But surely it would be reasonable to expect that the devotion, in the course of a very few years, of 160 millions sterling to undertakings which so far disappointed the expectations of their promoters as to pay with difficulty 2 and 3 per cent. per annum, would go far to disorganize the trade and finances of the country. It might be expected that the merchants and shopkeepers and small capitalists who put into railways the money previously employed in trade or in advances—and to their dismay found themselves the recipients of 2 instead of 10 per cent.—would constitute a distressed class so numerous and widely diffused as to amount to a national calamity. But no such national calamity has been patent. We have raised the 160 millions and spent it. The railways are finished, and the middle and trading classes have taken no harm by the process. Why? For the simple reason that to a large extent the 160 millions was supplied by increased exertions on the part of those who found themselves beset with calls and threatened with low dividends. We have worked very hard and put up with some severe pinches for a few years; but we have done what was required, and our railways remain probably the greatest example ever afforded of the capacity which lies within free enterprise, when fairly let alone, to work its way through the most severe trials.

But now, when the dangers of the first period are almost surmounted, what may be reasonably accepted as the prospects of the future? Where, for example, have the best customers of the railways been hitherto found—and where are they likely to be found in time to come? Whence comes even this small dividend of £3 2s. 6d. per cent. on the non preferential part of the total outlay of 309 millions! Does it come from high fares or low—from passengers or goods—from large gross receipts or small working expenses?

In considering these questions there seems to be no sort of difficulty in arriving at least at two conclusions, and these are: First, that the cost of the lines has very little to do with determining the rate of toll which it is possible to levy on those who use them; and second, that the progress of railway prosperity has corresponded very closely with the vigor and sagacity with which those who manage them have looked for income from the small contributions of an increasing class.

The idea once so common that railway fares must be, and ought to be high, because extravagance and folly raised the cost of the lines to £40,000 per mile, when it ought to have been £20,000, is already fading away. Railways, like everything else of the same sort—from a ferry boat to a factory—destined to earn a revenue by providing a certain kind of public accommodation, must depend wholly for the magnitude and continuance of that revenue upon the efficiency and cheapness with which the service is performed. An exactly parallel case may be met with every day in the compass of nearly every one's experience—in those instances, namely, where a man whose education may have cost thousands is compelled by the open competition for the best quality of service to seek earnestly a lower scale of remuneration than is readily given to a second man who has never seen the inside of a school room. Nor is there any injustice or hardship in this result; for if ultimate reward and success did not rest with those who produce the greatest good with the smallest expenditure of means, what we call society and civilization would assuredly not hold together for a single generation. The railways, then, have to earn a revenue by doing their work in the most efficient manner, keeping their stock ledger in the background as a record interesting to the shareholders, but of no more concern to the public than the expiring puff of one of their own superannuated engines.

And how are they likely to earn a revenue in the best and most efficient manner? Let us see.

We have compiled the following table (A) from some of the elaborate schedules in Captain Galton's work. It is a table intended to throw some light on the inquiry as to the sources of railway income during the last eight years; that is, from 1849 to 1856, both inclusive—or a period of time very well calculated to bring out the weak and strong points of railway management. The figures apply only to England and Wales: to have brought into the table the rest of the United Kingdom would have destroyed the value of the evidence by introducing discordant conditions. Here, then, is the table:

#### (A)—ENGLAND AND WALES.—Railways—

Eight years, 1849-56.—Gross receipts per mile open, from each class of passengers; and also the receipts per mile for goods:

Miles open.	Years.	Passengers—				Total
		1st.	2d.	3d.	Tot. Pas.*	Goods. pr. m.
No.		£	£	£		£
6,332	1856	411	476	448	1,364	1,756
6,165	1855	400	472	423	1,325	1,653
5,962	1854	406	486	407	1,324	1,584
5,770	1853	403	474	378	1,279	1,415
5,477	1852	379	471	350	1,220	1,037
5,217	1851	424	521	378	1,330	1,153
4,908	1850	380	498	321	1,199	1,117
4,355	1849	406	518	331	1,255	1,090

\*These tables include also a fourth class return, except in the years 1849 and 1850.

The result most obvious on the face of these figures is that passengers and goods have changed places as the chief elements in the gross earnings. The early railway managers expected—and with reason—that with the railways, as with the coaches, the passen-

gers would be the main resource, and so they were for a few years. But for the last four years, and the more rapidly as the lines open have extended, the goods traffic has shot ahead, and year by year has left the passenger traffic behind.

But this is not all; for when we come to look closely into the passenger traffic itself, we find the same continuous and confirmed tendency in the common to supersede in importance the dear kinds of service. The receipts from first class fares have barely maintained the level at which they stood eight years ago. The receipts from second class fares have seriously fallen off, namely, from £518 per mile in 1849 in the 4,355 miles open, to £476 per mile in 1856, with 6,332 miles open. But with the third class fares a precisely opposite class of changes has taken place. With scarcely a single exception of consequence during the eight years, the receipt per mile from third class fares has gone on increasing until, in 1856, the receipt of £448 per mile is quite 33 per cent. above receipt of £331 per mile in 1849. The percentage proportions to the total passenger traffic in 1849 and 1856 of the receipts per mile of the three classes of fares were as follows, viz:

Year.	First per cent.	Second per cent.	Third per cent.
1849.....	32	41	27
1856.....	32	35	33

While, therefore, in 1849 the common kinds of passenger service contributed a little more than a fourth part of the total passenger receipts, that proportion had been raised to quite a third part in 1856; the first class proportion remaining the same, but the second class proportion falling from 41 to 35 per cent.

But there is more evidence to be adduced.

We have seen in table (A) the gross results per mile of railway open. Let us now examine somewhat more in detail the relation between those larger results and the rate of fares and average payment by each person conveyed, and these further details will be found in the following table (B)—not extending to the eight years 1849-56, for Captain Galton's work does not give the needful data, but extending to the five years 1852-56:

(B) ENGLAND AND WALES.—Railways—Five years, 1852-56.—Details of the average receipts for passenger traffic.									
Years.	Mile.	First Class.		Second Class.		Third Class.		Total.	
		Av. pay.	Av. #.	Av. pay.	Av. #.	Av. pay.	Av. #.	Av. pay.	Av. #.
1856.....	43,330	2 07	4	1 44	4	1 16	6	1 77	12
1855.....	43,789	2 09	4	1 43	4	1 16	6	1 74	12
1854.....	47,792	2 10	4	1 43	4	1 16	6	1 74	12
1853.....	51,720	2 13	4	1 44	4	1 16	6	1 74	12
1852.....	54,596	2 11	4	1 43	4	1 16	6	1 74	12

Note.—In the above table the columns of "average payment per passenger" represent the total average sums paid in each year by each of the passengers conveyed. The columns of "average fare per mile per passenger" reduce the larger columns to a more convenient intelligibility.



We find here that the first class fares have fallen from 2.11d. per mile in 1852 to 2.07d. per mile in 1856; and average payments of each passenger conveyed, from 54.96d. in 1852 to 43.30d. in 1856; but in connection with these reduced fares and smaller individual payments, we have already seen from (A) that the earnings per mile open have somewhat risen, comparing 1856 with 1852.

In the second class the fares have risen slightly—that is, from 1.43d. in 1852 to 1.44d. in 1856—and the average payments have slightly fallen from 22.32d. to 20.45d., but the average earnings per mile (A) have remained almost unchanged.

In the third class the fares have fallen, and so have the individual payments; but the earnings, as we have already seen, have increased largely.

We may venture, then, without undue rashness, to infer that, so far as the evidence before us applies, three general conclusions seem to be justified at this stage of the inquiry, and these conclusions are:

First. That the revenue of railways during the last eight years—that is, during the period since the railway system had arrived at maturity in England and Wales—has been derived year by year in a larger proportion from common as distinguished from dearer kinds of service—and especially in the rapid relative growth of goods traffic.

Second. That during the same period a precisely similar result has taken place in the passenger traffic by increase of receipts from third class passengers, and the decline or non-increase of receipts from first and second class passengers.

Third. That as regards nearly all classes of passengers, the increase of passenger traffic per mile of railway has been accompanied by a reduction in the rates of fares, and also by a reduction in the average payments of each person conveyed—in other words, a larger revenue has been obtained by means of smaller individual contributions.

#### RESEARCHES UPON THE INFLUENCE OF SULPHUR UPON IRON, AND THAT OF PHOSPHORUS IN PARTIALLY NEUTRALIZING THE ACTION OF THE SULPHUR;—BY M. JANOYER.

[Translated from the Ann. des Mines, 6th vol., for 1854, p. 149, for the Amer. Jour. of Science and Arts, by W. J. Taylor.]

The deleterious influence of sulphur upon the qualities of the various kinds of iron is a fact known to all persons engaged in metallurgy. Indeed, it is well understood that there is a very great difference between the irons manufactured with charcoal and those with mineral coal. These last are nearly all more or less "hot-short," although made from the purest ores. This bad quality of the iron is to be attributed generally to the presence of the sulphur in the mineral coal. Traces of sulphur that can scarcely be detected by analysis, are sufficient to render the iron "hot-short." Such irons, treated in the cold, are soft and tenacious; they are generally wanting in lustre in the fracture, and are welded with great difficulty; on the contrary, they are very brittle when hot, especially at a cherry-red heat, from which fact they have received the name of "fers de couleur."

According to Karsten (Manuel de Metallurgie), 0.03375 per cent. of sulphur is sufficient to destroy the property of welding in the iron and to render it completely "hot-short." The latest analyses of the hot-short irons afford only one part of sulphur in 10,000 parts of iron.

The experiments made on this subject by this able metallurgist were carried out with great care. I will mention one operation on a great scale, which sustains his statement that the process by which the iron receives the sulphur, and which therefore is especially to be avoided, is the fusion of the ore in contact with the combustible mineral in the high furnace.

During the year 1850 I treated in the high furnace of L'Orme (Loire) only the ore from Privas (Ardeche), of which I have given the analysis (Annales des Mines, t. xx, 1855). This ore is a hematite (anhydrous sesquioxide of iron), with shining lustre, unctuous to the touch, leaving upon the fingers a greasy coating of a red color. It is very pure, and of course well adapted to make iron of excellent quality. As evidence, it will be sufficient to consult the excellent memoir by M. Gruner, Ingenieur in chef, des Mines, "On the ores of Privas and Lavoutte," (Ann. des Mines, 3<sup>e</sup> Serie). From pages 374 and 375 of this memoir the following analyses are taken, proving the purity of the Privas ores:

Rich ores.	Average ores.
Sesquioxide of iron. 83.9	69.2
Alumina. .... 0.8	...
Carbonate of lime. 7.4	Carb. lime, Mag., &c. 29.6
Silica and clay. .... 6.5	7.4
Water. .... 1.2	Water and butum. 3.2
Oxyd of manganese trace	...
99.8	100.0

According to the author, this ore contains scarcely a perceptible trace of sulphur and phosphorus. On page 376 he says, "Sulphur has in vain been sought for, and only the slightest trace of phosphorus has been detected. I ought, therefore, from the purity of the ores, to obtain an iron superior to any made in the neighborhood. Notwithstanding this, the iron afforded was moderately "hot-short." It presented, when cold, all the qualities of the best iron; soft, with black fibres, and without grain; it could be bent and twisted in every way without producing a flaw. On the contrary, at a cherry-red heat it was very brittle, and had lost all its tenacity.

The gangue of the ore was then assayed to determine if it contained barytes, for it is known often to occur with this kind of ore. \* \* \* The experiments proved that sulphate of baryta did not exist in the gangue. The following are the results of two complete analyses of the ore in which all these researches for sulphur were made:

Ore (Agatise).	Rich & laminated.
Volatile matters. .... 1.4	6.4
Silica. .... 11.0	12.4
Sesquioxide of iron. .... 82.0	74.0
Alumina. .... 1.6	1.0
Lime. .... 3.6	6.0
Manganese, sulphur. .... none	none.

It will be seen from the above that the "hot-short" property of the iron was not owing to the sulphur contained in the ore. It can, therefore, result only from the sulphids contained in the coke with which it was fused. The coke used in these experiments was invariably that of Peronniere, near Rive-de-Gier (Loire), the analyses of which (Annales des Mines, 1851, t. xx) afforded 0.28 per cent. of sulphur.

The combustible material consumed at this time amounted to 22,000 kilogrammes (57,200 lbs.) every twenty-four hours; introducing into the furnace in this space of time 614,600 of sulphur (160 lbs.), which, according to a preceding memoir, is only able to go from the high furnaces as a proto-sulphid in the iron, or in the state of sulphide of calcium in the slags. These last being slightly silicious, the

cast iron contained the principal portion of the sulphur.

It was, therefore, by no means impossible that this quantity should exert, in the high furnace, a very pernicious influence on the product, the cast iron obtained containing 0.003 per cent. of sulphur (20,000 kilogrammes every twenty-four hours, and supposing, which was not the case, that all the sulphur passed into the cast iron). This proto-sulphid of iron formed in the metal should be found, from its stability, in the wrought iron produced, so that there will then be more than sufficient sulphur to render the iron very "hot-short."

The objection may be made that the sulphur might have been introduced during the transformation of the cast into wrought iron during the puddling, in the presence of coal containing much pyrites, which permits a disengagement of half its sulphur at a red heat.

But I say still that the passage of sulphur into the iron certainly takes place in the fusion of the ore in contact with the coke in the furnace stack; for at this time the same ore from Privas was treated in the same high furnace with charcoal, and under the same very careful conditions which were used in fusing the same with coke. The slags were entirely silicious, like those obtained in the experiments with the mineral coal, which would favor the complete passage of the sulphur into the cast iron by preventing it from escaping as a sulphid of calcium, in the slags. The slag contained silica 53.77, alumina 17.93,\* lime 28.30=100. \* \* \*

The lime was found to be entirely taken up by the silica, and consequently could have no affinity for the sulphur. Notwithstanding, the cast iron obtained, puddled in the same furnaces with sand and coal,† by the same workmen, and under exactly the same conditions, gave an iron which presented in all points the characters of the best iron; its tenacity was perfect at all temperatures, presenting none of the characters of a brittle iron at a cherry-red heat.

Independent of the influence of the sulphur in coke, this experiment shows that it is important to demonstrate a fact practically; the action of sulphur, as will be clearly perceived, was in the fusion of the ore in contact with the combustible mineral, and not in the transformation of the cast iron into wrought iron by puddling.

It may hence be concluded that the sulphurous acid disengaged from the coal upon the grate of the puddling furnace and in reheating has no sensible effect on the iron. The sulphid which may be formed in the transformation of the cast iron into wrought iron at the surface of the metallic bath, is always where it is exposed to the oxydation, and, as M. Berthier has said, it combines with the oxyd of iron to form oxysulphids, which separate from the iron in the state of scoria and scales. I have never assayed the scoria from the refining without obtaining considerable quantities of sulphur. A careful analysis of a scoria from the refining that was very compact and contained no free iron, gave me 0.152 per cent. of sulphur.

These facts established, I sought to prevent this action of sulphur in the high furnace, at least in part, by combining the observations of the learned Karsten (according to whom the best irons appear to contain at least

\*The protoxyd of iron, owing to its small quantity, was not separated from the alumina.

†The coal employed came from the mine DuBois d'Avelze, concession de Terre Noire. It is classified and described by M. Gruner in his memoir (Annales des Mines, t. 11, 5e serie, p. 166).]



0.002 to 0.003 per cent. of phosphorus) with the observations that I have made upon strong and hard irons made with coke mixed with pure argillaceous and phosphatic ores. These last mentioned irons, possessing none of the properties of the "fers de couleurs," are produced under the same circumstances as the "hot-short" iron which I obtained when the ores contained not the least sulphur, and the coke employed for their fusion was equally sulphurous.

The very soft iron "hot-short" resisted fracture when cold; the two extremities of the bar were brought to within 0.005 (2-10 of an inch) of each other without the least flaw or crack being distinguished in the bend, when the very hard iron has broken when the two extremities were within 5½ inches of each other (the two pieces of iron used in these trials were of the same length). On the contrary, when the very soft iron, heated at a "cherry-red," was bent to two points, say A and B, it broke without presenting the least tenacity, while the very hard iron perfectly resisted the trial when heated at the same temperature.

The very hard iron, although less good when cold than the very soft iron, generally considered was preferable to the "hot-short" iron, the working of it heated being easier. These irons, as has already been said, were produced under the same circumstances, excepting the mixture of phosphatic ores for the very hard iron.

Persuaded, then, that phosphorus here plays an important part, I made some trials on a large scale in the high furnace, by introducing phosphorus into the cast iron. I took for this purpose the ore of Villebois (Ain), an oolitic mineral very phosphatic, which, according to the analyses of M. Berthier (*Essai par la voie sèche*, t. II, p. 231), contains sesquioxide of iron 34.8, water 12.6, phosphoric acid 0.2, clay 34.4, carbonate of lime 18.0. Owing to the large proportion of phosphorus, I added this ore in very small quantities so as not to obtain an iron "cold-short." Experiment determined that the proportion should be 1-5 of the charge of ore.

I had then a bed of fusion equal to 240 kilogrammes (624 lbs.) of cast metal containing 0.106 (3-10 of a lb.) of phosphorus, which gives an iron containing 0.00045 per cent. of this element. I obtained by this means iron far superior to those previously obtained, and without any loss of its tenacity in the cold; they did not contain the least trace of the "hot-short" qualities. I will cite an example: A piece of iron 0.055 by 0.015 (2×½ in.), manufactured without admixture of phosphatic ore, when heated, broke at every bend; and a piece of the same size manufactured from the cast metal, containing 0.00045 per cent. of phosphorus, resisted fracture perfectly.

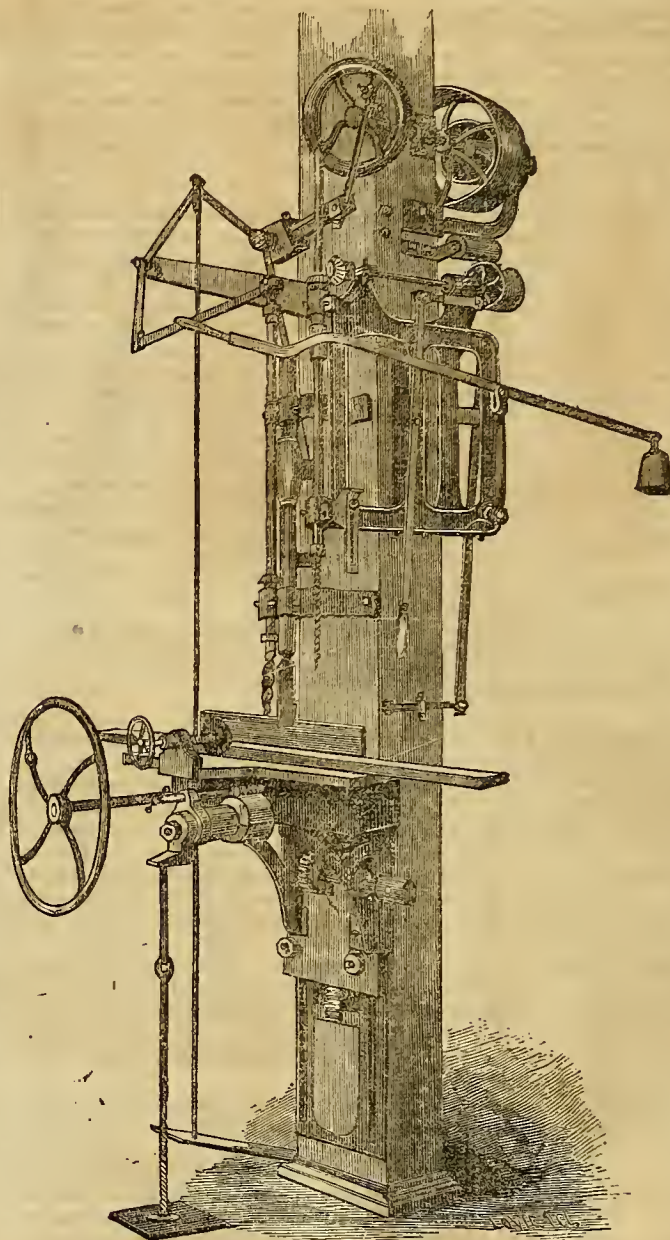
The explanation of this remarkable fact, already recognized in practical metallurgy, is thence apparent; the iron and the castings are much better as the qualities and varieties of ores mixed in the bed of fusion are more numerous, and the amelioration of quality is owing to the influence of foreign bodies, such as manganese and phosphorus, from the different ores.\*

\*NOTE BY W. J. T.—According to Schafhaull (*J. fur Chem.*, xl, 304), cast iron, bar iron, and steel, almost always contain more or less arsenic and phosphorus. Thus the celebrated Dannemora iron and the English Low-Moor iron owe their good qualities to the presence of arsenic; and a particular kind of Russian iron (marked CC NB) from Demidoff's works, at Nischnitaglsk, is indebted for its peculiar properties to the phosphorus which it contains. (Gmelin (Cavendish edit.), vol. v, p. 214.)

[TO BE CONTINUED.]

## LANE & BODLEY'S POWER MORTISER.

We have previously given our readers a full description of this admirable labor saving machine; we now propose to add that of their recently invented Boring Attachment for Car-Work. Most of the timber used in car-work is so heavy that the trouble of handling it and moving nearly compensates for the saving obtained by machine work. It is therefore a desideratum to do as much work as possible with the least possible handling. The object of the additional Boring Attachment is to make all the bolt holes with the same handling used for mortising. The boring mandril is fixed on a square sliding frame to the right of the mortiser. The perpendicular handle seen in the figure enables the operator to move the mandril forwards or backwards at will. The horizontal handle enables him to graduate the depth of bore. With this attachment LANE & BODLEY'S Power Mortising Machine becomes an article of indispensable necessity wherever cars are made or repaired.



### PENNSYLVANIA R. R.

OFFICE OF THE PENNSYLVANIA R. R. CO.,  
PHILADELPHIA, NOV. 3, 1857.

At a meeting of the Board of Directors, held this day, the following resolution was adopted:

*Resolved*, That it is not advisable to declare a dividend upon the stock of this company at this time.

In coming to the conclusion stated in the above resolution, the Board of Directors deem it proper to submit to the stockholders the reasons that have led them to adopt this course—notwithstanding that the earnings of the company for the last six months show no diminution from those of a similar period last year.

The Board admits that the receipts of the road have been equal to their expectations; but it is also true that these receipts have been earned at extremely low rates—the result of unwise competition between the several railroads leading from the East to the West.

This competition, which the Pennsylvania Railroad Company could not control or ignore without serious injury to the trade of the city and State, has not only led to the adoption of unremunerative tariffs, but has entailed upon each line the heavy cost of maintaining high speeds, and the employment of numerous agents and drummers for the soliciting of freight and travel—thus materially enhancing the expense of operating each road, while the rates of transportation have been reduced below public requirements.

In addition to these injurious influences, which have affected to an equal extent the income of our rivals, the revenues of the Pennsylvania Railroad Company have been subject to a still further reduction by the imposition of a fixed State "duty upon tonnage," which must be paid, whether the freight charge yields a net profit to the company or not, or the business rejected.

The consequences that have resulted from the competition referred to, if permitted to remain unregulated, were foreseen at an early date, and an attempt made to arrest its evil



effects, but the movement was not sustained.

The present crisis, however, by putting a stop to an undue extension of railroad credits, has brought all companies to a position where the interests of the stockholders must be considered in the contest for the carrying trade between the East and the West, and each line be permitted to secure that business which naturally belongs to it. With this view, an arrangement, founded upon just and equitable principles, has been entered into between the New York Central, the New York & Erie, the Baltimore & Ohio, and the Pennsylvania Railroad Companies, which, it is believed, will secure better prices and a large reduction in the expenses of working the respective roads, while the public are protected from unreasonable charges.

Notwithstanding the difficulties enumerated, the accounts of the company show that a dividend of fully three per cent. could be safely made from the profits of the last six months (a period of the year during which the business of the road is comparatively light), did not the necessities of the company, under the existing financial panic, imperatively require that the whole of the net revenue should be devoted to the extinguishment of its unfunded liabilities, incurred in the construction of the second track, the improvement of the works purchased from the State, and the equipment of the road.

With a view to lessen these expenditures, the Board has directed that all outlays upon the second track shall be discontinued, and it has materially reduced the pay of all the officers and employees of the company.

To prevent a diversion of the net receipts of the road from the dividend account, arrangements were made in May last to dispose of second mortgage bonds in England, which would have proved entirely successful but for the interruption to the sale of railway securities by the unlooked-for insurrection in India. Previous to that date the money markets of Europe had not recovered from the heavy expenditures caused by the war between the Allies and Russia. Our own market, under the prevailing rage for cheap securities, has been crowded with those of a less substantial character, promising larger returns to the purchaser, and, in consequence, it has not been prepared, except to a limited extent, to absorb our bonds at rates current elsewhere.

The unfunded or floating debt of the company on the 31st of October last was.....\$1,194,261 86  
As an offset against which, the company have cash in bank and bills receivable, for the transportation of coal, &c..... 403,324 67

Leaving the actual floating debt.....\$791,937 19

To meet this, and continue the work on the second track, the company has \$2,737,000 of second mortgage bonds unsold. If these can be disposed of at reasonable rates the debt can be rapidly canceled, and the whole net revenues of the company, whatever they may be, divided among the stockholders. Should the money market continue in a state to reject all railroad securities, without regard to their character, the net receipts of the road for the next six months will, we think, suffice to pay off the whole unfunded debt of the company, and will be so applied.

The funded debt of the consists of bonds, secured by two mortgages upon the road between Harrisburg and Pittsburg, of \$5,000,000 each.

Of these bonds, there is outstanding of the 1st

mortgage.....\$1,905,000  
And of the 2d mortgage there has been sold..... 2,263,000

Making the total funded debt.....\$7,168,000

We have not thought it necessary to confuse this statement by including in it the funded debt incurred for the purchase of the Main Line of the Public Works, amounting to \$7,500,000, bearing five per cent. interest, as that is secured by a lien upon the works purchased, and can readily be provided for as it falls due.

The stockholders will perceive from this statement of the indebtedness of the company, that they possess a valuable property, free from any financial difficulties that cannot be met by the suspension of the present, or, at most, an additional semi-annual dividend, if a satisfactory sale cannot be made of our securities.

It will be borne in mind that this company has paid six per cent. upon its capital stock annually, from the commencement of the construction of the road until the period when dividends were declared, and since that time a surplus over six per cent. has been paid to the stockholders, equivalent to a three per cent. dividend for the past six months.

By order of the Board.

J. EDGAR THOMSON, Pres't.

### MONETARY AND COMMERCIAL

Since our last issue there has been no real improvement in money matters. There is, however, a good deal of *talked improvement*, and that is all. It is, in fact, "all talk and no cider." It is in vain that our contemporaries tell a different story. We, however, agree with them that the indications are that there will be some improvement soon. The demand for money is not great, but what little is wanted cannot be had even at sacrificing rates. There is money enough (gold at that) hoarded up in our community to ease up business, and enable our manufacturers to keep their hands employed, and prevent their becoming a positive and direct burden for their support; but the Shylocks in whose hands it is are the most frightened rabbits of all the human race, and are wholly unwilling to loan it, unless to parties who really do not need it, while those who are *feeding the million*, and are straining every nerve to keep the wolf from the poor man's door, no matter what the *security* they may offer, cannot obtain it.

We trust, however, that this state of things is nearly at an end, and that now, as exchange and gold are falling in price, that the Banks of Ohio, Indiana and Kentucky will be induced to let out at least a portion of the eight millions which they have called in. One half of it would make a material difference in our mercantile and manufacturing circles, that would tell wonderfully on the working and laboring classes.

Never before in the history of panics were the business and producing classes so well able to *secure* the small amounts they need to borrow as at present, and it is most absurd that they should not be able to obtain them. If the banks pursue this course, then will the private coffers open and things will go on as before.

Eastern exchange is in less demand, and the supply is more abundant. Rates have declined to 3@3½ prem. buying, and 4 prem. selling, with a continued downward tendency. Philadelphia is dull at par to 2 prem., and Baltimore at 1 dis. @ par. Gold is dull at 2½@3 prem. buying, and 3½@4 prem. selling.

#### SALES AT THE NEW YORK STOCK BOARD—NOV. 8.

\$500 N. Y. State 6s, '73.....	105½
2,000 N. Y. State 6s, '65.....	103
5,000 Ohio State 6s, '86.....	93½
1,000 Michigan 6s.....	85
9,000 Mississippi State 6s.....	72½
2,000 North Carolina State 6s.....	82½
2,000 Tenn. State 6s, '90.....	77
1,000 Virginia 6s.....	82½
10,000 Louisiana 6s.....	78
2,000 Illinois Central R. R. Bonds.....	73
1,000 Terre Haute and Alton 2d mort. Bonds.....	45
500 N. Y. Central 7s.....	92
190 shares New York Central.....	69½
26 " Pacific Mail St. Co.....	78
43 " Del. & H. C. Company.....	98
200 " Cleveland & Toledo.....	33½
177 " Chicago & Rock Island.....	71½
75 " Milwaukee & Miss.....	20½

150 " LaCrosse & Milwaukee.....	6½
50 " Illinois Central.....	86
20 " Harlem R. R. stock.....	6½
170 " Erie R. R.....	14½
200 " Reading.....	34
200 " Harlem R. R. pref.....	20 3/4
65 " Mich. Cent.....	50
100 " Mich. S. & N. Ind.....	12½
20 " do do pref.....	27½
25 " Panama.....	76½
100 " Galena & Chicago.....	70

MILWAUKEE AND HORICON RAILROAD.—INTEREST ON CITY BONDS.—We copied from the New York Tribune a statement to the effect that the Milwaukee and Horicon Railroad, among others, had "defaulted" on the payment of bonds of this city, due on the 4th in New York. We are authorized to say, and are pleased to be able to do so, that the statement, so far as the Milwaukee and Horicon Railroad is concerned, is untrue.—*Milwaukee Sentinel*.

INDEBTEDNESS OF ST. PAUL.—The St. Paul Advertiser says, at the present time there is not less than \$600,000 of overdue and protested paper deposited by Eastern creditors in the banks of that city; that the indebtedness in St. Paul, to banks alone, due or to become due in six months, is \$750,000 more; while the Eastern indebtedness of merchants and others, to mature in the same period, is \$1,200,000. That is, the city owes \$2,500,000, of which \$1,500,000 is due to the East. Other towns in the Territory are similarly involved.

### POPULATION OF CANADA.

A statement has been published showing the population of Upper and Lower Canada in 1851, and the estimated increase up to 1st of January, 1857. The supposed increase is based on returns made to the Bureau of Agriculture and Statistics. We append the totals:

Total population of Lower Canada in 1851.....	890,261
do Upper do do.....	852,004
	1,842,295
Total estimated population of Lower Canada up to January 1, 1857.....	1,220,624
Total estimated population of Upper Canada up to January 1, 1857.....	1,350,923
	2,571,437
Total estimated increase of population in Canada in five years.....	726,172

## ALLEN & NOYES' METALLIC PACKING. To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,  
Respectfully Yours,

D. M. CARHART,  
Box 1831, Cleveland, Ohio.

oct29-6m



**CONSULTING ENGINEER.**

THE undersigned may be consulted upon the location, construction, equipment and management of Railroads in any part of the United States or Canada, and upon the most approved modes of constructing heavy masonry for bridges and the superstructure thereof, whether of wood or iron. Also, upon the best form of rail, and of laying down and maintaining a permanent railway, and in general upon all subjects properly connected with Civil Engineering in its highest branches and in its most difficult application.

A long and intimate connection with the construction and management of our most important American Railroads, and a personal knowledge of those in Europe, should render the undersigned competent to give such advice or make such suggestions, as will enable Railroad Companies to avoid errors of location, construction and management, which are more or less inseparable from all new enterprises in our country.

Engineers of highest character and professional attainments and competent superintendents, can be recommended or supplied to Railroad Companies, for immediate service, on surveys and construction, and on management.

ISAAC R. TRIMBLE,  
Consulting Engineer,  
118 Park st., Baltimore.

je4

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
Feb 5-1f 10 Wall st., near Broadway, New York.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being tapered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.  
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. Feb 5-1y

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 228 H Street, Washington, D. C.

ap12

**Locomotives and Passenger Cars FOR SALE CHEAP.**

1 LOCOMOTIVE, made at the Boston Locomotive Works, four and one-half feet driving-wheels, in good running order.

1 Locomotive, made at the New Jersey Locomotive Works, twenty-four tons, five feet driving-wheels, sixteen by twenty-four inch cylinder.

3 Passenger Cars, for sixty passengers; one has never been used, and the others only for a short time.

The two Locomotives and two of the Cars are at Lexington, and one car at Maysville, Ky., and can be seen on application to W. M. Whittlesey, at the former, and A. M. January, at the latter place.

The above will be sold very cheap for cash or short approved paper. For further information apply to

CAMMANN & CO.,

Oct. 14.

No 56 Wall street, New York.

**The Great Arnold Secret Discovered at Last****BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.**

Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. Record.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. Copying.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.  
N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

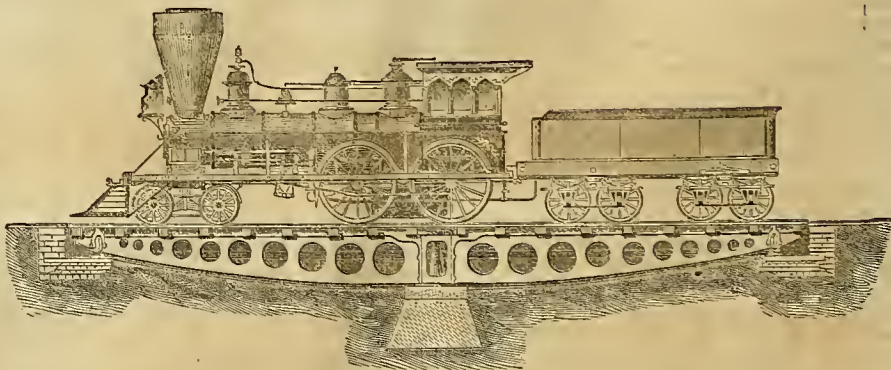
The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

**William Sellers & Co.**

—L A T E—

**BANCROFT & SELLERS,**

16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING AND SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, Jr.



## WAREHOUSE

No. 5 FRONT STREET,  
Opposite Public Landing,  
Cincinnati, O.

## PORTER, ROLFE &amp; SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."

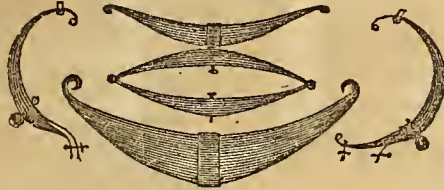
We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

## MCDANIEL &amp; HORNER,

## LOCOMOTIVE AND CAR SPRING



## MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

## References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va

## ALBERT M. LEA,

CIVIL ENGINEER,

KNOXVILLE, TENN.

## New Works on Civil Engineering.

THE Field Practice of Laying out Circular Curve for Railroads. By John C. Trautwine, Civil Engineer.—4th Thousand, in pocket-book form with tucks.

## —ALSO—

A New Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Tables and 10 Engraved Plates of Diagrams. By John C. Trautwine, C. E.; 2d edition.

Price, one dollar each. Postage on the Curves, five cents; on the Excavations and Embankments, eight cents. For sale by WILLIAM HAMILTON.

Hall of the Franklin Institute, Philadelphia, Pa.

Sept. 21-3\*

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,

Jy 30

No. 66 Broadway, N. Y.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 5 1/2 to 5 9/16 lbs. per lineal yard, now at New Orleans, for sale by

Feb 19 1m

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,  
Wilmington - - - - - Delaware.

MANUFACTURERS OF

## CHILLED WHEELS

AND

## TIRES,

## For R. R. Cars &amp; Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,  
EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

## WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Harlan & Hollingsworth,

WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

## MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

oc2

## Union Works, Baltimore.

## POOLE &amp; HUNT,

## Iron Founders &amp; General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

## Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

## ANDERSON, GATES &amp; WRIGHT,

## STATIONERS, BOOKSELLERS,

—AND—

## Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,

(Successors to Jacob Ernst.)

112, Main Street, Cincinnati

## J. T. CRAPSEY,

## ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

## SCHENECTADY

## Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

## LOCOMOTIVE ENGINES,

AND TENDERS, AND

## RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Aul10.17



GENERAL

## RAILWAY SUPPLY AGENCY.

SNOOK &amp; HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

JOHN W. KELLY,  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

RAILROAD ENGINES &amp; CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for build-  
era of railroads, mines, quarries, gunsmiths, lock-  
smiths, machine shops, boiler makers, gas filters and  
mathematical and optical instrument makers. They  
are the only forge made that can be used without filling  
the fire bed with brick or clay. They are so constructed  
that the fire cannot injure the bellows, which is in the  
cylinder, under the fire bed. They can be put up in any  
desired position, and the smoke be conducted to the flue  
by a pipe.

Railroad companies and others in want of Portable  
Forges will address W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

THOMAS D. STETSON,

Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

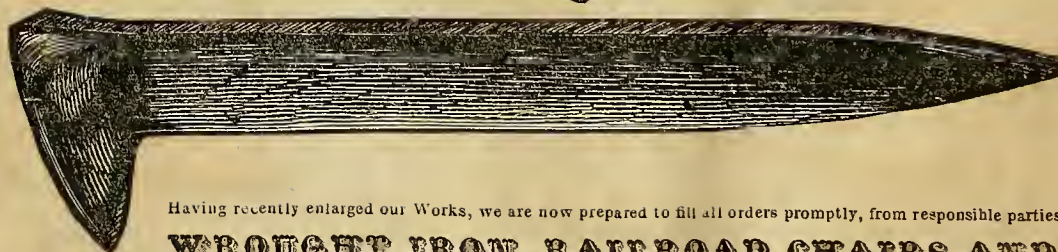
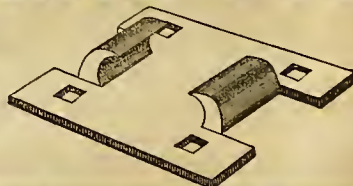
Applications for Letters Patent. Careful written  
Opinions of Inventions. Important aid in bringing out  
inventions. oc22

CINCINNATI WROUGHT-IRON

## RAILROAD CHAIR &amp; SPIKE WORKS.

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

WROUGHT IRON RAILROAD CHAIRS AND SPIKES.

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, and can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.17

Works and Office, North side Congress St., East of Canal Bridge.

J. B. GREEN &amp; BRO., Proprietors.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA AND NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 25½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. for the West and South, as above.

E. J. PECK,

ap 10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE &amp; LEAVITT.

1857.

November 9.

1857.

1857.

Summer Arrangement.

1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.

THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 8:30 P. M. Evening Express, through to Bellair and Pittsburgh without change of cars.

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 4:40 P. M., for Springfield and Columbus.

This train also makes connections for Wilmington, Lancaster and Zanesville. This train stops at all points between Cincinnati, Springfield and Columbus.

FOURTH TRAIN.—Cleveland, Pittsburgh and Wheeling Night Express, leaves Cincinnati at 8:30 o'clock P. M., for all the Eastern cities.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House; or at the Old Office, south-east corner Broadway and Front, opposite Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

B. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no 12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BARCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan 2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE &amp; CO.,

Jan 8 1y 119 Walnut st., Odd Fellows' Building

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURG, INDIANAPOLIS, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPORT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOET EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and sapper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## “STEAMER BAY CITY.”

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

## Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply in the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

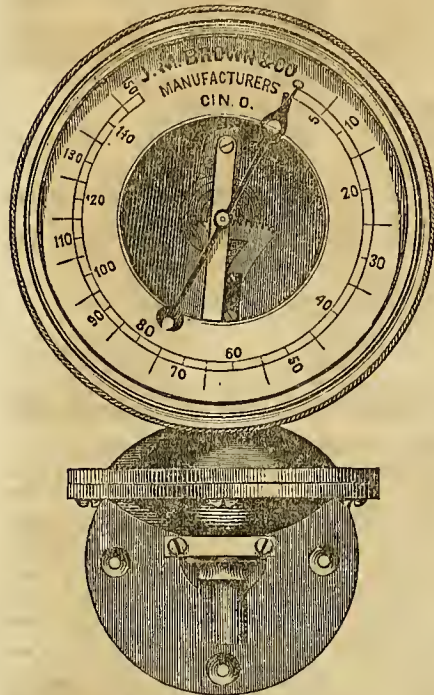
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent.]



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front Street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES  
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## Norris' Locomotive Works.



ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.  
**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,  
Manufacturers of  
**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.  
**WROUGHT IRON WELDED TUBES.**  
From ¼ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.  
Warehouse, 85 South Third St.,  
PHILADELPHIA. Aug

**RAILROAD IRON.  
LOCOMOTIVES.**  
4,000 Tons rails, 58 to 61 lbs. per yard 200 tons  
rails 49 lbs. per yard. 1,000 tons rails 55 lbs.  
per yard. Also several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by  
J. H. GOODMAN & CO.,  
Feb 7, '56-2m.1 no. 7 Wall st., N.

**RAILROAD CAR  
AND  
COACH TRIMMINGS.  
DOREMUS & NIXON  
No 21 Park Place, and 18 Murray st.,  
NEW YORK,  
IMPORTERS  
OF**

**Plain and Figured Mohair Plush.  
Printed & Unrent do., Entirely New Designs;  
MOQUETTES & VELVET CARPETS;  
Enameled Cloth, for seats & backs of Cars  
ROPE MATTING, Every Width.  
Oil Cloths for Head Linings, Enameled with Gold and Silver;  
DUCK CANVASS FOR CAR ROOFS;  
Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;**

**PATENT FELT.  
FOR CUSHION & MATTRESS FILLING  
N. B. We have the Plush in bond for exportation  
sept 18 DOREMUS & NIXON**

**W. G. ATKINSON,  
Civil Engineer, Surveyor & Draftsman.  
CUMBERLAND, MD.  
RAILROAD routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.**

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared. mar 10 y

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.  
The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

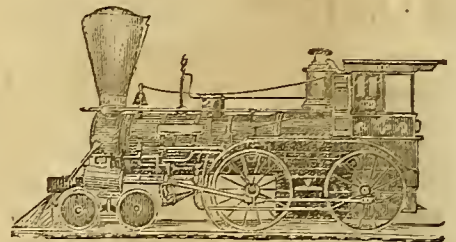
The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$100 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

P. DUDLEY,  
President of the Board.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,  
64 Courtlandt Street, New York.  
Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws.

**LOCOMOTIVE ENGINE LANTERNS**  
From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.  
**ENAMELLED HEAD LININGS**  
Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.  
Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**  
Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,  
Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.  
ALFRED BRIDGES,  
Late Davenport, Bridges & Co., Fitchburg, Mass.  
1005.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND  
**Compound Steam Pumping Engine,**

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.  
SILVER MEDAL. (The highest prize) awarded  
for McGowan's Patent Pumping Engine at the late Fair of the Ohio Mechanics' Institute. June 18, 1855 1



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....NOVEMBER 19, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	24 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 39.

#### EDITORIAL.

American Inventive Genius—Patent Office Report.....	601
Trial of Steam Engines.....	601

#### RAILROADS.

Public Works of Missouri.....	602
Baltimore and Ohio R. R.....	603
Railroads in Georgia.....	605
Blue Ridge Tunnel.....	606
Sale of the Philadelphia & Sunbury Railway.....	601

#### MISCELLANEOUS.

Relief Bill for the Banks of Missouri.....	606
Researches upon the Influence of Sulphur upon Iron, and that of Phosphorus in Partially Neutralizing the Action of the Sulphur; by M. Janoyer.....	607

#### MONETARY AND STOCKS.

Sales at the New York Stock Board.....	608
Monetary and Commercial.....	608

**SALE OF THE PHILADELPHIA AND SUNBURY RAILWAY.**—On Monday last this road extending from Sunbury to Mt. Carmel or where it intersects the Mine Hill extension, was sold under a sheriff's execution to E. S. Whelan, of Philadelphia, together with seven tracts of coal land, containing about 3,000 acres, on which is erected the "Lancaster Colliery" and other improvements, and also all the locomotive engines and cars. The sale was made by the holders of the second mortgage bonds, and was, of course, subject to the first mortgage, which amounts to \$700,000. The second mortgage amounts to \$500,000. The Sunbury American says:

"The road is in excellent condition and must always prove one of the most productive in the country. The coal lands and improvements, are alone, worth, perhaps, \$250,000 or \$300,000. If the new company would dispose of these lands, the proceeds would enable them to make a through connection with the Mine Hill extension, and stock the road, and make it one of the most valuable improvements in the country."—*American Railway Times*.

VOL. 5.—No. 39.

### AMERICAN INVENTIVE GENIUS—PATENT OFFICE REPORT.

The Reports of the Patent Office are curious exhibitions of one form of Human Development. They exhibit the inventive operation of the Human Mind—not as it would flow out spontaneously,—in pursuit of brilliant ideas; but as Invention is used for profit! The time has gone by when either literature or inventions are produced for fame, or glory. Poetry has almost ceased to be. Painting languishes. Sculpture exists only in two or three localities; and men make inventions, not as things ingenious or beautiful, but as things that will *pay*! This brief word of three letters—*p-a-y*—expresses now the whole end of human action. *Will it pay?* comprehends the whole practical philosophy of the day. We can not believe that mankind will rise to a higher or purer level by the practice of this philosophy. But, we can not deny that it has done some good. It has enabled men of genius to *live by their wits*; a thing which thousands have always endeavored to do, but seldom succeeded in. Now, when a man of brilliant faculties is nothing but a Professor, Teacher, or Artist, or Clergyman, at a poor salary, he turns his leisure hours to inventing something, for which the public are willing to *pay*. Thus, when Stoves begun to come into fashion, we behold President NORR, of Union College, burning his midnight lamp to make a good Stove, which he does, succeeds and makes a fortune. Professor OLMSTEAD, of Yale College, does the same, and thus the dream of mathematical theories is relieved by aiding the culinary department. When rapidity of motion became the order of the day, Mr. MORSE, President of the Academy of Fine Arts, stops painting and invents a Telegraph, which *pays* better than all the painting since the days of Appelles!

Well, why not? Why should men of letters, of science, and the elegant arts, be compelled to sigh their hours away in penury? At any rate, American Genius most emphatically takes the path that will pay. Let any one look into the Patent Office Reports, and he will see hundreds of Inventions of which the object is to make machinery, like Pinder's razors, to *sell*. Sometimes this succeeds, and the sale of Patent Rights, (now an extensive business,) makes their owners fortunes. This is the case with the patent for Plowing Machines, an exceedingly valuable one.

The sale of Patent Rights is now carried on all over the country, as regularly as any other business. We shall scarcely wonder at this, when we consider the immense number of Patents issued. Dividing the number of Patents issued recently into three periods, we have this result:

From 1842 to 1846, inclusive.....	2,671
From 1847 to 1851, inclusive.....	4,172
From 1852 to 1856, inclusive.....	8,406
Increase from first to second period.....	55 per cent.
Increase from second to third period.....	100 per cent.

When is this enormous increase to cease?

Never! while the chances of drawing a prize in the Patent Lottery is so much greater than in all other Lotteries, and the capital required is so small. The applications filed in the last year were nearly 5,000. The Commissioner of the Patent Office remarks, that the number of Patents issued in this country is now greater than those granted by the English Office, and the number of applications greater than those made in France! France has 33 per cent. more population than that of the United States, and the French people are by no means dull. But, the fact is, the United States is the land of enterprise, and there is the place to make Patents profitable. A curious fact is, that nearly all the Patents of this country are for useful purposes.—Thus:

Agricultural Machinery.....	300
Sewing Machines.....	25
Furnaces, &c.....	20
Stoves, &c.....	84

Stoves have occupied mind, quite as much as any one article till recently. But now, Agricultural Machines are all the rage; and well they may be, for they will be of immense service, not merely to agriculture, but to the entire world. For want of labor, agriculture has been flagging. A much larger proportion of persons go to cities than remain in towns. The result is, that if things remained as they were, the supply of agricultural products must soon fall below the wants of the country. A continued rise of prices, and ultimate danger of starvation would be the consequence. These Agricultural Machines, however, diminish the amount of labor required, and thus do the work of men. The principal Machines of this description, now in use, are the Mowers, Reapers, Harvesters, and Drills. The number of those made in the United States, we do not know; but in Ohio they have increased wonderfully, and the manufacture of Agricultural Machines alone, amounts to millions of dollars! Yet, this whole business is the creation of the last five years. About twelve years since, the public mind was first excited on this subject, by the appearance of McCormick's Reaper. *This Machine* was exhibited in Cincinnati, and found to be successful. It has since been extensively used in Illinois. A few years after, American Agricultural Machines were exhibited at the World's Fair, and found to be more admired than anything else we exhibited. It was just, too, for these Agricultural Machines are found to be doing a great work for the prosperity of this and other lands. Our country is so immense, and the necessity for its cultivation so great, that all the inventive genius of America will be required to produce the Machinery for its cultivation.

### TRIAL OF STEAM ENGINES.

An interesting experiment is being made in connection with the recent Annual Fair of the American Institute at the Crystal Palace, New York. Previous announcement had been made, inviting stationary steam engines from the best manufacturers to be entered for competition, all to be subjected to similar and very rigid tests; and three splendid specimens of this class of machinery, differing very con-



siderably from each other in style, have been entered, and are now, we presume, undergoing the tests which were promised. We cannot vouch for the zeal or accuracy with which this will be conducted; but have every reason to suppose that the experiments will be conducted with impartiality. The results, it may be hoped, will throw some light on what is an extremely important subject, to the very large class of manufacturers who employ steam power—the actual comparative merits of different styles of engines. It may be very seriously questioned by many, whether there is or is not much difference in the desirability of stationary steam engines. There are some which may be, they say, more economical of steam than others; but this difference is more or less compensated for by the increased complexity and expense of the machinery. The committee which is appointed to decide on the relative merits of these engines, are instructed to recognize all the important elements which are involved in the subject in practice—First, the relative expense of the machines in first cost and repairs; second, the economy of steam, and consequently, of fuel; and third, the degree of perfection attained in the regulation of the speed.

That there are considerable differences in the merits of stationary engines, those best informed upon the subject cannot, for a moment, doubt. The Corliss Steam Engine Company of Providence—one of the competitors in this trial—has, in a great number of instances, removed good common engines from large manufactories, and supplied their own for simply the saving of fuel in a period varying from two and a half to five years, and have, in many instances, received, in this manner, a considerably higher price for their engines than they demanded at the outset. One of the cotton mills in Newburyport—a large concern of some seventeen thousand spindles—was thus *re-engined*, and the sum actually paid (the saving in five years) was between \$18,000 and \$19,000, while the actual price demanded for the engine at the first, was only between \$10,000 and \$11,000. And these engines do not involve any increased degree of difficulty or expense in keeping in order, and are described as, in every instance, regulating with an extraordinary degree of perfection. In the trials now entered on, this engine, which has come to be considered almost a miracle of perfection in economy, has been matched against two later inventions of somewhat similar style; and we hope the trials will be conducted with such care as will aid in forming a correct estimate of the true value of each and of all, as compared either with each other, or with the engines now in most common use. We shall publish an abstract of the results so soon as we can obtain it.

## Railroads.

### PUBLIC WORKS OF MISSOURI.

#### REPORT OF THE BOARD.

To his Excellency, *Robert M. Stewart*,  
Governor of Missouri:

SIR. The law creating the Board of Public Works, makes it their duty, once in each year, to report to you in regard to the "construction and management of each of the railroad companies in the State of Missouri." The Board are authorized, should they deem it necessary, to employ an engineer, to aid them in their examinations. The Board concluded not to employ an engineer, but to rely upon themselves for a proper discharge of the duties imposed by law.

There are six railroads in Missouri, including the Southwest Branch, in the process of construction, and which have received the aid of the State, viz: the Pacific, the Southwest Branch, the Iron Mountain, the North Missouri, the Hannibal and St. Joseph, and the Cairo and Fulton road. The aggregate State credit granted to these roads is \$24,250,000, and \$700,000 to the Platte County Road, making the whole amount of State credit authorized, in bonds, for all roads, \$24,950,000. The aggregate of bonds issued by the State to the companies is \$16,010,000, which leaves \$8,940,000 yet to be issued. Of this sum, \$3,800,000 are bonds to be guaranteed by the State for the use of the Southwest Branch of the Pacific Railroad, and although these bonds are to be endorsed by the State, and bear seven per cent. interest, they are not regarded in the stock market as first class bonds, and cannot be sold for as much as bonds, directly issued by the State, bearing an interest of only six per cent. The Board would suggest, that, as the proceeds of direct bonds would be greater than those arising from guaranteed bonds, and the interest less, by using the same securities, the State would be as well protected on direct bonds as it now is upon guaranteed bonds, and that it might be good policy to substitute direct for guaranteed bonds.

A more particular statement in regard to bonds authorized to each company, the amount received, sold and hypothecated by each with the discount on the same, will be found in the tables and statements furnished for this report. The lowest rates at which bonds have been sold, as shown by these statements are 69 3-4 by the Iron Mountain Company, 67 1-2 by the North Missouri Company, 65 by the Pacific Company, and 80 by the Cairo and Fulton Company. The fiscal agency in Boston of the Hannibal and St. Joseph Company, has furnished no statement later than the 1st of June of bonds sold. The Board has requested the Secretary at Hannibal to obtain from the agency a statement of bonds

sold since that time, with the rate of discount on same, at the earliest possible day, and hopes to receive it in time to report before the Legislature adjourns.

The statements connected with this report also show the present condition of the several roads—their stock subscription, the amounts paid, and discount on same; their expenditures, liabilities, and resources; the amount required to open the Iron Mountain Road for business; the amounts expended by the Pacific Company to designated points west of Jefferson City; the amounts necessary to complete and make available the unfinished work west of Jefferson City; the amount required to open the North Missouri road to Mexico, and to the junction with the Hannibal and St. Joseph Road; the length of track laid on the Iron Mountain, the North Missouri, and Hannibal and St. Joseph roads; the maximum grade of the several roads; the amount of interest to be paid by each of the companies, &c., &c.

The change in the grade of the Hannibal and St. Joseph Railroad has attracted general attention, and been commented on by the press, with a good deal of severity. In order to place the matter distinctly before the Legislature, the Board requested Mr. Hayward, the General Agent of the company to state in writing what changes had been made from the grade adopted in the original contract.—In Mr. Hayward's reply, it will be seen that he places the maximum grade at 80 feet to the mile, but also states that a "steeper grade has been permitted in five or six cases, not exceeding 105 6-10 feet per mile." He further states that "none of the steeper grades are arranged with reference to permanency, but are so adjusted as to be easily changed to conform to the original contract." Mr. Hunt the Chief Engineer, in his reply to questions, states that the "steepest grade over which trains now run is 95 feet per mile, and that it is surmounted without difficulty by their ordinary trains."

In connection with this report, and to illustrate the effect of grades of various steepness, upon the capacity of a twenty-four ton locomotive to transport freight, we give a table in which the effect of grade is calculated up to 110 feet per mile. By this table it will be seen that a steep grade forms a great impediment to heavy freight trains. Light passenger trains are much less affected by steep grades. The difference between grades of 50 and 80 feet, on these light trains, is no doubt less than is generally supposed, but steep grades should never be adopted except when unavoidable. The materials used in the construction of the roads are believed, in the main, to be of good quality. It is the opinion of the Board, however, that instead of the trestle bridge over South River, on the Hannibal and St. Joseph road, an embank-



ment should have been made. It would have been safer, more durable, and cheaper in the end. The track on all the roads seems to be well laid, but is, to some extent, yet unballasted. When the ballasting is finished, and the drainage completed, our roads, in this respect, will, no doubt, compare favorably with the best roads in the country.

The construction of these roads has created a large debt, and our bonds are greatly reduced in value. Some part of this reduction may be attributed to the mode adopted in putting them on the market. Instead of using them as species of currency to answer all the temporary exigencies of the company to which they were issued, they should have passed through the hands of an agent, and been placed, as far as possible, in the possession of retired capitalists, whose chief inducement to hold them would have been the interest upon the capital invested in them. Now, their value can only be reinstated by establishing a sinking fund, providing for the interest on the whole amount issued, and withholding, for the present, our bonds from the market, except so far as it may be necessary to complete unfinished work to certain points, and thereby enable the roads, by their business, to pay at least a portion of their interest.

The Expenditures on the Pacific, west of Jefferson City, to Round Hill amount to.....	\$723,552 59
Additional amount required to open, for business, to Round Hill.....	215,400 00
The expenditures on the Iron Mountain Road amount to.....	3,367,142 69
Additional amount required to open the road through for business.....	476,000 00
The expenditures on the North Missouri Road amount to.....	3,824,218 53
Amount required to open the road to Mexico.....	206,000 00
	<u>\$7,914,913 08</u>

These figures show the amount expended and the additional amounts required to open the roads to the points designated. It is believed that the business of the Iron Mountain Road will be very limited until the whole work is completed; then, a large business is anticipated for it by those who profess to be familiar with the resources of the country through which it runs. The business of the North Missouri, it is thought, will be greatly increased by extending the road to Mexico. The extension of the Pacific to Round Hill will accommodate a large scope of country, and, it is thought, will add considerably to the revenues of the company. The statement concerning the Cairo and Fulton Railroad was prepared by the President of that company, and presented to the Board.

The length of track laid on each of the roads is as follows:

On the Hannibal and St. Jo road.....	64 Miles.
On the North Missouri road.....	75 "
On the Iron Mountain road.....	46 "
On the Pacific west of Jefferson City.....	7 "
Whole length of track on the Pacific.....	132 "

All of which is respectfully submitted.

G. W. HOUGH,  
S. P. VANNOY,  
HENRY OVERSTOLZ.

#### BALTIMORE AND OHIO RAILROAD.

The gross earnings of the Main Stem have been \$4,616,998 95, being an increase of \$231,047 08 over the preceding year—and of \$905,545 10 over the fiscal year of 1855.

This increase is quite satisfactory in view of the very severe winter of 1856–7, light crops of 1856, and the extraordinary financial embarrassments of the latter part of the fiscal year; and especially taking into consideration the general falling off of revenue of many of the leading roads in the country.

The expenses of working the Main Stem for the year, and of keeping the road and machinery in repair, have amounted to \$2,760,785 14, being 59.79 per cent. upon the gross earnings.

During the year the following payments have been made on the Funded Debt, viz:

In liquidation of the Loan No. 1 (bonds of 1854).....	\$33,618 41
In liquidation of the Loan No. 3 (iron bonds due January 1, 1857).....	113,333 53
Making together.....	<u>\$169,951 74</u>
And the subjoined amounts have been invested in perfecting and increasing the capacity and advantages of the Company, in the respective items of capital, viz:	
Cost of road (principally arching tunnels).....	\$371,655 29
Second track.....	359,397 74
Rolling power.....	276,235 26
Real estate.....	101,904 35
	<u>1,109,192 64</u>

And making in all.....\$1,276,144 38

The aid required by the North-Western Virginia Railroad Company, and the expenditures necessary to place it in proper working order, have proved much larger than were anticipated by its managers, and relied upon by this Company. Exclusive of the guarantees of its bonds, the means of this Company have advanced to the extent of \$1,247,710 33 which, reduced by the amount of purchases of the Grafton property, &c., still leaves their debt to this Company \$1,102,683 99.

By reference to the statement of assets and liabilities, it will be seen that the Company has an extraordinary amount of materials on hand, viz:

In the Machinery Department.....	\$290,559 89
Do. Road do.....	242,347 25
Making together.....	<u>\$532,907 14</u>
At the close of the last fiscal year the amounts were respectively \$151,306 13	
And.....	<u>111,260 56</u>
	<u>262,566 59</u>

Exhibiting an increase of.....\$270,340 45

The addition in the rolling power of the Main Stem for the year have been, viz:

27 first class locomotives,  
106 burthen cars,  
13 passenger and baggage cars,

exclusive of ninety-four burthen cars and six passenger and baggage cars, built to replace cars broken by accident and worn out, costing \$50,039 26, which sum, as usual, has been charged to repairs.

With the large quantity of material on hand, and great increase of machinery, which is now in excess of the requirements of the business of the Company, it will be judicious to make no further purchases, and no invest-

ments in machinery will probably be required for a long period, even should a great increase of business be realized.

These important sources for reduced expenditures will have a most salutary and favorable effect on the financial condition of the Company for the approaching year.

During the twelve months the sum of \$463,583 91 has been received of the city loan. Deducting the ten per cent. deposited with the Register of the city, to be invested for the sinking fund, the receipts in stock from that source have been \$417,225 52, and the Company have advanced, and have now with the city, subject to their order, \$174,866 for expenditure in August and September on double track and arching tunnels.

The loan of one million dollars of Bonds of 1854 issued for the construction of the Washington Branch, is now liquidated, except \$89,488, which have not yet been presented for payment. The dividends and rent from this investment, for the past year, have been \$101,512, which is a clear net gain to the stockholders of the Main Stem.

The Sinking Funds of the Company are being steadily augmented, and have now reached \$683,754 41, presenting an increase since September 30th, 1856, of \$194,668 24. Embraced in this sum, under the action of the Board, is the Mortgage Bond of \$113,333 33, which matured January 1, 1857.

The balance of cash in the Treasury, on 30th September, was \$82,644 78, after depositing \$155,761 08 for the payment of interest, which matures on this date, on the City Loan and the Bonds of the Company.

The money pressure has caused collections to be difficult, and the revenue due amounts to the unusually large sum of \$326,762 99, which, however, will now be rapidly lessened.

It will be noted that, notwithstanding the large sums granted in aid of the North-Western Virginia road, and the very important expenditures in additional equipment and construction, the Bills Payable, including \$317,838 08, issued for the use of, and loaned to the North-Western Virginia Railroad Co., amounts only to \$820,898 78. The entire sum being less than the value of the materials on hand and the uncollected revenue, the aggregate of which is \$859,670 13.

The Treasurer's exhibit presents the profit and loss account, which after deducting interest and ground rents \$787,577 10, paid during the twelve months, tax on passengers to the State of Virginia \$13,334 26, and discount on Bonds of the City of Baltimore, sold, \$17,817 97, shows the clear gain for the fiscal year of \$1,207,717 64, or nearly 12 per cent. on the capital stock.

A dividend of three per cent. was declared in October last, and paid out of the cash on hand, at the close of the last fiscal year, and



a similar dividend of three per cent. was declared in April last.

While the large net earnings of the past six months would not only seem to justify but require a dividend for that period, yet, on a calm and dispassionate survey of the present general financial and commercial embarrassments and uncertainties, it is deemed judicious to defer for the present its declaration until the restoration and active prosecution of mercantile operations ensures the continuance of the Company's revenues.

The Profit and Loss account exhibits a surplus of \$4,434,210 39, showing an increase for the year, after deducting the dividends paid, of \$601,138 64.

In December last the Board declared an extra dividend from the undivided profits, of 30 per cent. in Scrip, the interest on which was to be paid semi-annually, and the principal to be converted into Stock in five years. Its delivery to the stockholders was restrained by legal process, and its legality now awaits the decision of the courts.

#### WASHINGTON BRANCH.

The revenue for the fiscal year has amounted to \$454,459 84, being an increase of \$10,239 75 over the previous year; and the expenses to \$196,080 65, being 43.14 per cent., leaving net \$258,379 19, and a net gain of \$22,435 25.

During the year three first class passenger locomotives engines and five burden cars have been purchased at a cost of \$29,980, and paid for from the earnings.

A semi-annual dividend of 4½ per cent. was declared in October, and the same in April last, and the same for the last six months, payable on the 16th proximo. The amount accruing to the State from the Washington Branch for one-fifth of the receipts on passengers, amounts to \$76,038 16, being about 29½ per cent. on the net earnings.

#### NORTH-WESTERN VIRGINIA R. R. COMPANY.

In December last, a lease of this road for five years, was agreed upon. The condition of the road proved much more unfinished than the statements presented to this Company had indicated. A large force was therefore organized upon the road, to place it in safe working order. The expenditures have been necessarily large, and have very heavily exceeded the estimates furnished to this Company. The improvements of the road progressed, so that since the first of July last, a considerable business has been transacted upon the line with safety and regularity.

It is expected that the great advantages and strength of position of the terminus of this road, nearly 200 miles south of Pittsburgh, will be realized during the coming year, in commanding a large association of business for the route, from the valleys of the Ohio and Mississippi.

#### GENERAL REMARKS.

The connections of the Baltimore and Ohio Company, for the transportation of freight and passengers, have been materially improved during the past year, especially in the West. The interchange of business with the Marietta and Cincinnati road has commenced during the past three months, and a large increase may be anticipated during the coming year.

The river trade to Parkersburg will probably be greatly improved by shipments to that point, which have heretofore reached eastern markets via New Orleans.

The Central Ohio road continues to prove a most valuable auxiliary. Its contributions to our traffic for the year past have been 86,060 tons of freight, and 21,692 passengers.

The Cleveland and Wellsville Company works cordially with our road. Since the completion of their line to Bridgeport, opposite Wheeling, regular exchanges of freight and passengers occur, and we may reasonably anticipate an increasing business from this source.

The aggregate revenue of the Main Stem and Branches (N. W. Virginia) for three months, amounts to \$5,145,682 36.

In order to perfect and maintain the machinery and road in the best and most effective condition, the expenditures have been very large, viz:

For repairs of locomotives and cars.....	\$796,610 95
Do railway.....	581,978 95
Do bridges.....	68,120 39

The correct policy of liberal maintenance and improvements have been again exhibited by the remarkable exemption of the Company from accidents, no passenger having been seriously injured during the entire year; and transportation generally having been conducted with great regularity and dispatch.

The stockholders are congratulated upon the completion, in the most superior and substantial manner, of the arching of Kingwood, the longest and most difficult tunnel.

The important work of arching the remaining tunnels is being energetically prosecuted.

The construction of the second track has been pressed vigorously, and it is gratifying to announce that twenty-four miles and 4,700 feet have been laid during the year, in addition to which five miles of the road-bed have been graded, of which three miles are ballasted and ready for the track.

The sidings of the Main Stem have also been increased three and one-fifth miles. Seventy-six miles of track have been re-laid with new iron during the year, all of which, as customary, has been charged to repairs.

The Board is gratified in finding the results of the coal trade so fully endorsing their policy, as announced in the last Annual Report.

The increased facilities of the Company in additional motive power and double track,

have enabled it to transport 539,068 tons during the year, being an increase of 73,055 tons, or 13½ per cent. over the preceding year.

The superior and valuable character of the bituminous coal of Maryland, for steam and manufacturing purposes, continues constantly to attract consumers.

Highly appreciating the value of this important trade, the Company, as heretofore, will spare no effort to continue its development.

To the reforms which have been recently and generally proposed in railroad management, having in view proper remuneration for service, and the grand features of spending less and earning more, by which course only the immense railroad investments of this country are to be preserved as valuable properties to their stockholders, this Board has given its decided and cordial sanction. Recent intercourse between the officers of the great East and West lines, has resulted in an agreement, which, it is believed, will hereafter prevent improper rivalries, and tend to create and maintain an effective co-operation for the benefit of all the great interests involved.

The Board announces its satisfaction that the immense business which the Company has transacted during the year, resulting in a revenue of upwards of five millions of dollars, has contributed so advantageously to the commerce, progress and prosperity of the city of Baltimore, and of the States of Maryland and Virginia.

As the recent paralysis of trade promises to be removed at an early period, with the abundant crops in the West, and the great advantages and attractions of the Baltimore and Ohio road for passengers and freight, which are now so generally known and conceded, the Board expresses the reasonable hope and conviction with the largely increased capacity of the road, that the Company will render still more important services to those interests, and effect profitable results for its stockholders.

*Statement of the Revenue and Expenses of the Baltimore and Ohio Railroad Company, for the fiscal year ending on the 30th September, 1857.*

REVENUE.....	\$4,616,998 95
Expenses of transportation.....	\$1,032,248 18
Repairs of locomotives.....	492,559 07
Repairs of burden cars.....	233,009 69
Repairs of passenger cars.....	51,052 19
Repairs of stationary machinery	63,210 50
Contingent expenses of machinery department.....	19,340 00
Repairs of railways.....	581,978 95
Repairs of bridges.....	68,120 39
Repairs of water stations.....	26,772 31
Repairs of depots.....	52,667 93
Watching bridges.....	7,685 60
Watching cuts.....	34,293 00
Watching tunnels.....	3,674 75
Pumping water.....	9,639 77
General expenses.....	38,937 20
Losses by accidents.....	20,447 12
Repairs of telegraph.....	4,168 29
	<u>9,760,785 14</u>

Showing the expenses of revenue over working expenses to have been.....\$1,836,213 81  
Working expenses 59 70-100 per cent.



*Statement of the Liabilities and Assets of the  
Baltimore and Ohio Railroad Company on  
the 30th September, 1857.*

LIABILITIES.	
Stock.....	\$10,110,500 00
Scrip account.....	8,402 00
Preferred stock.....	3,000,000 00
Loan at 6 per cent.....	\$89,488 00
Do. No. 2 at 6 per cent.....	1,000,000 00
Do. No. 3 at 6 per cent.....	453,333 32
Do. No. 4 at 6 per cent. with coupons.....	1,128,500 00
Do. No. 5 at 6 per cent. with coupons.....	700,000 00
Do. No. 6 at 6 per cent. with coupons.....	2,500,000 00
City loan—amount received.....	4,294,483 91
Bills payable.....	503,060 70
Do. for the use of, and loaned to N. W. Va. R. R. Co.....	317,838 08
Washington branch road.....	163,149 59
Open accounts.....	22,202 95
Profit and loss.....	4,434,210 39
	\$28,725,268 94
ASSETS.	
Cost of road.....	\$18,167,209 93
Second track.....	1,489,437 12
Rolling power.....	3,515,784 48
Real estate.....	1,241,487 19
	24,413,918 72
Bonds of the Central Ohio R. R. Co.....	400,000 00
Central Ohio R. R. Co.....	59,381 53
Western Telegraph Co.....	2,191 27
Stock on Pittsburgh and Connellsville R. R. Co.....	35,000 00
Bonds of the City of Baltimore.....	22,694 00
North-Western Virginia R. R. Co.....	\$625,701 57
Bills receivable for notes of N. W. Va. R. R. Co. for loans, etc.....	476,982 42
Wellersburg and West Newton Pl'k Road Co.....	6,550 00
Stock of Washington Branch Road.....	1,016,800 00
Marietta and Cincinnati R. R. Co.....	2,399 90
Sinking Fund—For the redemp- tion of the million loan.....	\$20,000 00
Sinking Fund—Of the five mil- lion loan sinking fund.....	510,979 42
Sinking Fund—Of the mortgage debts.....	117,333 33
Sinking Fund—Of the ground rents on Camden station.....	35,441 66
Bills receivable.....	5,000 00
Cash in hands of officers for disbursement..	11,911 49
Outstanding dues.....	20,761 78
Uncollected revenue.....	326,762 99
Machinery department.....	290,559 89
Road department.....	242,347 25
Treasurer—Balance in treasury for the deposits for interest of \$64,418 76 on the city loan, and \$91,342 32 on the mortgage bonds of the Company which matured on the 1st proximo.....	82,644 78
	\$28,725,268 94

### RAILROADS IN GEORGIA.

The following notice of the Railroads of Georgia, is from the annual report of the Governor to the Legislature of that state. He says of the Western and Atlantic Railroad:

Its gross earnings from the 30th September, 1853, to the 30th September, 1857, which covers the four years of my administration, have been \$3,052,260.82. The working expenses of the road, for the same period have been \$1,329,411.51, and the net earnings \$1,722,849.31. How has this large amount of net profits been disposed of? Has it been squandered or applied to necessary expenditures? These are questions which should be answered to the satisfaction of the people, and when thus answered the senseless clamor which is raised against the management of the road, for mere decency's sake, ought to cease. Then, see how the account stands:

Net earnings for four years.....	\$1,722,849 31
Net earnings were disposed of as fol- lows, to-wit for 1854:	
Paid State Treasurer.....	\$50,000 00
" Interest on bonds.....	11,996 90
" For new locomotives.....	24,211 65
" For new cars.....	68,580 57
" For new buildings.....	102,726 73
" For construction, new track and iron, and right of way.....	80,696 21
For 1855.	
Paid State Treasurer.....	100,000 00
" Interest on bonds.....	15,536 30
" For new locomotives.....	20,053 50
" For new cars.....	54,141 81
" For new depot buildings.....	13,290 09
" For construction, right of way, iron, and new track.....	236,025 53
For 1856.	
Paid State Treasurer.....	43,500 00
" Interest on bonds.....	9,145 00
" For new locomotives.....	92,153 48
" For new cars.....	112,082 05
" For new depot buildings.....	42,988 90
For construction, iron rails, and new track.....	122,880 04
" For expenses incurred pre- vious to Jan'y, 1854, Ten- nessee claims.....	67,081 21
For 1857.	
Paid State Treasurer.....	100,000 00
" Interest on bonds.....	7,265 65
" For new engines.....	107,752 42
" For new cars.....	97,852 16
" For new depot buildings.....	52,062 96
" For construction, iron rails, new track.....	100,947 91—\$1,722,849 31

Whether these expenditures were proper is left for fair-minded men to determine.— They, at least, seem suited to the enterprise, and cannot be considered unreasonable, when it is recollected that the road is not even yet completed and thoroughly equipped for the annually increasing business it is compelled to accommodate. At all events, it will scarcely be asserted by any, having a due regard to veracity, that the money has been either stolen or wasted. But these heavy expenditures will not be required hereafter. The time has come for the potence of the friends of the road to have its reward. I fully concur with the Superintendent that henceforth, under proper management, it will pay into the State Treasury \$350,000 annually.

It may be suggested, however, that the mismanagement is not in the application of the net earnings, but in the expenses of maintaining and working the road. Let us see how the State Road compares, in this respect, with other roads in the State—what proportion the current expenses bear to the gross earnings. The gross earnings of the Georgia Railroad, for the last four years, were \$4,016,346 14; the expenses for working and maintaining it for the same period, were \$1,848,617 02, or about 45 per cent. The gross earnings of the Macon and Western Road for the four years, from December 1852 to December, 1856, were \$1,290,445 00, and the working expenses for the same period, \$469,340 00, or 50½ per cent. The gross earnings of the Central Railroad, including the line from Gordon to Eatonton, from December 1st, 1853, to December 1st, 1856, and the line from Millen to Augusta, to the 1st of January, 1856, were \$4,697,260 63; and the current expenses for the same period were \$2,219,043 17, or 47¼ per cent. These are confessedly the best managed Company

Roads in Georgia. But the Western Atlantic Railroad compares favorably with them, in reference to the point under consideration. Its gross earnings, for the last four years, are \$3,052,260 82, and its working expenses for the same period, \$1,329,411 51, or a little less than 43½ per cent. It would seem that the country might afford to be satisfied if the State Road has managed as cheaply as those of private Companies. Certainly, the fact is worthy of consideration, when its administration is branded with corruption and mismanagement.

The Atlantic and Gulf Railroad Company, chartered by the last Legislature, has been duly organized. The Board of Commissioners designated in the Charter, met in Milledgeville, on the 31st of March, 1856, and made the necessary arrangements for opening books of subscription for stock at Milledgeville, and sundry other points in the State. On the 22d day of October, 1856, six of the said Commissioners submitted to me a list of subscribers, showing subscriptions to the amount of six hundred thousand dollars, and the amount subscribed by each, attested by their affidavit, that the subscribers so reported, will be fully able to pay up the sums so subscribed by them, and that the subscriptions were bona fide. Whereupon, on the 26th of October, 1856, by virtue of the 2d. section of the Act of Incorporation, I subscribed for stock, to the extent of \$500,000 00, in the name of the State of Georgia, and caused the subscription list to be deposited in the office of the Comptroller General. On the same day the sum of \$1,000,100 00, being subscribed, I issued an order, as directed by the third section of the Act of Incorporation, for an election of nine Directors, to be held in Milledgeville, on the 4th day of December, 1856, under the superintendence of the Commissioners. They met accordingly and elected James P. Screven, William B. Hodgson, J. Stoddard, Hiram Roberts, W. H. Long, Charles J. Munnerlyn, J. R. Stapler, A. T. McIntyre and E. R. Young, as a Board of Directors, who elected James P. Screven their President.

To enable the Legislature to understand clearly the condition of this important enterprise, in which the State has liberally embarked, by subscribing for one million of its stock, I herewith transmit a communication from James P. Screven, its President, with the accompanying documents to which he refers. The fifth section of the Act of Incorporation provides that "no payment shall be made by the State until the 'Savannah, Albany, and Gulf Railroad Company, and the 'Brunswick and Florida Railroad Company' shall have relinquished any right which either of said Companies have or claim to interfere with the location of said road, on account of any privileges granted in the charter of either of them." Such relinquish-



ments have not been executed, and therefore the enterprise can not move forward. The documents referred to contain the fruitless negotiations between the parties in interest, touching the relinquishment required; and by careful examination, you will be enabled to determine who, if any one, is to blame for their failure. The intention of Georgia is declared in the Charter to be "to provide a main trunk across her territory, connecting the Atlantic with the Gulf of Mexico." The object is worthy of a great State, and so important to her Southern section, that I trust it may not be defeated, and that, in your wisdom, you will take such further action, in the premises, as will secure its accomplishment.

On the subject of State aid to works of Internal Improvement, I have nothing to add to what I said in my last biennial message. In few words, my view of sound and safe policy, confirmed by mature reflection, is this: Georgia occupies the gap between the southern spur of the Alleghany mountains and the Atlantic. At an immense cost she has constructed the Western and Atlantic Railroad, which taps the Great West, at Chattanooga; affords transportation for its products to the sea board, and feeds the various roads which connect at its Southern terminus, at Atlanta. In chartering new Rail Roads, the Legislature should never lose sight of the policy of protecting her State Road from ruinous competition; she should be careful not to cripple the efficiency of company roads, which have been built by private capital; she should preserve the symmetry of our system of Internal Improvements, so that, in its further development and growth to maturity, it shall, as a primary object, promote her own wealth, and the prosperity of her towns and seaports. Augusta, Savannah, and Brunswick, are the three points of commerce, of which the productions of our agriculture must find their market and their door of exit to the mart of the world. The perfection of our Internal Improvement system, as well as the interests of agriculture, requires that each of these commercial points shall be connected, as closely as possible, with each section of the state, so that all our people may enjoy a choice of markets for the sale of their produce. The State may aid in the construction of the lines of road, projected, in reference to such connections, upon guaranties of security, that prevent the possibility of ultimate loss. Beyond this, she ought not to go. As to the mode in which she should extend her aid, I prefer the loan of her credit, for a given amount, per mile, to a subscription for stock. By the former method she can secure herself by statutory lien upon the road and its appurtenances; whereas, by the latter, she must rely upon the success and profits of the enterprise. In chartering the Atlantic and Gulf Road, the last Legislature seemed to favor the policy of taking stock, in aid of that

work. I sanctioned the bill, not that I approved of that feature, but because it fell so clearly within the principle of the policy in reference to State aid, which I advocate, and the road itself is of such immediate and paramount necessity to the southern portion of Georgia, that I deemed it better to yield my scruples on that score, than to defeat the noble enterprise.

#### BLUE RIDGE TUNNEL.

During our absence we visited this much talked of work, in order to form a more correct judgement of its nature and character, than any to be derived from a mere description of it. It has always been regarded as the great barrier to the construction of the Blue Ridge Railroad and for this reason, public attention has been more especially directed to this portion of the work than to any other part of the enterprise. It is said to be one of the longest Tunnels in the United States, and when it is remembered that it is through one solid rock, it cannot of course be accomplished without considerable cost to the company. This circumstance will, however, render the work cheaper in the end than any other description of Tunneling, by preventing future outlays in repairing the arching overhead; but whenever it has been prosecuted so nearly to completion as to remove the want of public confidence, of which it has been the chief source, the principal difficulty in the way of this Road will have been overcome, and its construction placed beyond a doubt. Relieved of this obstacle, the route from this place to Knoxville will compare favorably with any other in the United States, through the same range of mountains.

The work upon this tunnel may, in all fairness be said never to have been commenced under circumstances favorable to its prosecution until the middle of last year. The requisite machinery was not procured and used upon the work, nor was an adequate force employed in pushing it forward, until the present contractors, Messrs. Geo. Collyer and Co., commenced operations a little over one year ago. This, the most important part of the work, was thus delayed, while other parts of it, less difficult of completion, were successfully progressing. The company perceived this, and in annulling its contract with Anson Bangs and Co., assign this as one of the grounds upon which it proceeded to do so.

An examination of the work, and a comparison of the progress made by Mr. Collyer in the last year with that of the previous contractors, will show how much depends upon the energy and industry with which it is prosecuted. It has progressed steadily and rapidly, and our observation has inspired us with confidence in the experience of the present contractor and his ability to complete the Tunnel within a few years, notwithstanding the occasional delays to which he is subjected by the want of a full force.

The eastern end of the Tunnel has been finished, and is ready for the track to an extent something over 450 feet, while the company in the western end has penetrated to the extent of 200 feet. Shafts Nos. 1 and 4 are to grade level, and the two companies in the 1st, working in opposite directions, have finished over 200 feet. Shaft No. 4, have recently reached grade level, two companies will be shortly employed in that one, upon the lateral excavations. Shaft No. 2. is steadily

progressing, and is within 70 feet of grade level. With the exception of Shaft No. 3. upon which there was a temporary suspension of the work, on account of an injury to the engine, the work at every point was progressing by day and night with all the force that could be conveniently employed. When all the shafts have reached grade level, they will afford work for eight companies, besides two others in the opposite ends of the Tunnel. Each company consists of 25 men, and we were informed that each one could excavate from 25 to 30 feet per month. Thus it will be perceived that under the constant supervision of the present energetic contractor, this great work is going on with an industry and regularity which ensures its early completion, and entitles it to the fullest public confidence. It is a work of no small importance, and is destined to produce a new era in our prosperity. Its advantages are already sensibly felt in this section of the State, and as it progresses they will be more generally extended. Commercially and politically it will be a great public blessing. It will afford an easy and ready access to a portion of country which for resources, health and scenery is unsurpassed by any other on earth. It will give the tide of Southern travel a new direction, and retain at home the wealth which has been so lavishly squandered abroad. In view of these results, and the settled public opinion in favor of the communication proposed by this Road, we cannot but be encouraged by the progress which is being made upon the work everywhere.—*Anderson Gazette.*

#### RELIEF BILL FOR THE BANKS OF MISSOURI.

The following is the bill for the relief of the banks of Missouri, which has just passed the house:

##### *An Act for the Relief of the Banks of the State of Missouri.*

WHEREAS, By a general and unexpected demand for gold and silver coin, unprecedented in the history of the country, and entirely beyond all the wants of commerce, the Bank of the State of Missouri, in common with the oldest and strongest Banks of the Union, has been compelled to suspend specie payments. Therefore,

*Be it enacted by the General Assembly of the State of Missouri, as follows:*

Section 1. All provisions of an act entitled "An act to regulate banks and banking institutions, and to create the office of Bank Commissioner;" approved 2d day of March, 1857, which subjects the said bank of the State of Missouri to any penalties by way of intent or otherwise, because of a failure to pay the debts of said banks with specie, and all provisions of said act, which authorize or direct any proceedings to be commenced and prosecuted against said bank, or which authorize or direct any proceeding of any officer of the State against said bank because of the suspensions of specie payments by said bank, he and the same are hereby suspended, until the first day of November, in the year eighteen hundred and fifty-eight, or earlier, if the banks in the principal cities resume, and in the opinion of the Bank Commissioner, it is prudent to do so, and if on the said last mentioned day, the said bank shall fully resume the payment of all its debts and liabilities with gold and silver coin, then they shall have all the rights, benefits, and advantages granted in charter, and may proceed to exercise the franchise and privileges granted by the said act,



and shall be exempt from all penalties and forfeitures, as if no suspension of specie payment had taken place.

Sec. 2. So much of the thirty-seventh section of the first article of said act as requires that the amount of gold and silver on hand should not be less than thirty-three and a third cent. of the notes of the said bank in circulation; and so much of said section as directs the commencement of proceedings against said bank, because such bank may not have on hands the required proportion of specie, and the same is hereby suspended in its operations, until the first day in November, in the year eighteen hundred and fifty-eight.

Sec. 3. That so much of the fifth section of the first article of said act, requiring every bank located in the city of St. Louis to publish a weekly statement be, and it is hereby repealed; and so much of said section as requires to be published a quarterly statement of the condition of said banks, &c., be suspended, till said banks shall fully resume specie payments.

Sec. 4. That the Bank Commissioners are hereby required not to register and countersign any more bank bills for circulation for the Bank of the State of Missouri, till said bank shall fully resume specie payments; nor shall they countersign and register bank bills for circulation for any bank created under the law to regulate banks, and banking institutions, approved March 2, 1857, till the first day of November, 1858.

This act to take effect from and after its passage.

#### RESEARCHES UPON THE INFLUENCE OF SULPHUR UPON IRON, AND THAT OF PHOSPHORUS IN PARTIALLY NEUTRALIZING THE ACTION OF THE SULPHUR; BY M. JANVIER.

[Translated from the Ann. des Mines, 6th vol., for 1854, p. 149, for the Amer. Jour. of science and Arts by W. J. Taylor.]

We cannot disregard, in this case, the influence of phosphorus, which was the only agent introduced into the new portion. The constitution of the slag was the same, and the cast metal had been produced under the same circumstances; the puddling and the reheating were made in the same manner and with the same fuel.

But how is it that the phosphorus can counteract the influence of the sulphur? This question I shall endeavor to answer by deduction from the facts and experiments made by me during the last two years, persuaded that it is of interest for science, since it throws light on the triple combinations of carbon, iron and phosphorus, besides being of great use in practice.

To arrive at a knowledge of this action of phosphorus upon sulphur in the cast metal, I made two experiments, as follows: I remelted in a naked crucible, in a forge: 1st,  $3\frac{1}{2}$  gram. of an excellent gray white iron, containing much graphite with 0.14 pyrites (bisulphuret of iron). 2d,  $\frac{1}{2}$  gram. of the same iron, with 0.14 pyrites, 0.14 calcined bones, and 0.09 of a refractory white clay.

In these two trials I introduced into the cast iron a fixed quantity of sulphur; but in the last I added also a certain quantity of phosphorus, for the predisposing affinity of the silica for the bases at a high temperature would necessarily lead to the decomposition of the phosphate of lime of the calcined bones, and the phosphoric acid reduced by the carbon of the cast iron would combine with the iron to form a phosphuret of iron. The experi-

ment succeeded perfectly. The fusion was complete, and the temperature was pushed even to the softening of the crucible. The two buttons, when broken, were entirely white, as I have mentioned in a previous memoir, "*Sur l'influence de soufre sur la nature des fontes.*"

The button which contained only the sulphur bent quite well under the hammer, although the cast iron was of very bad quality; it was only a mass of filamentary crystallizations of protosulphid of iron. This cast iron had a dull aspect, and it was very difficult to pulverize in a mortar; it flattened so as to afford small plates. Certain portions especially were very ductile. These portions doubtless contained some of the iron free; for it is known, according to the researches of M. Fournet, "*Sur les sulfures metalliques,*" contrary to the assertions of Krsten (Manuel de Metallurgie, p. 122), that the protosulphid of iron can be partially decomposed in presence of carbon at a high temperature. This learned geologist in heating to 150° (pyrometer) in a brasqued crucible some pyrites, obtained a button of protosulphid of iron which was scarcely at all magnetic. This same button heated strongly a second time under the same circumstances, became after this second fusion strongly magnetic, from which fact it is concluded that a loss of sulphur had resulted, and a production of free iron in the protosulphid.

The button which contained some sulphur and phosphorus was, unlike the first, very brittle; it is easily pulverized and does not yield in the least under the hammer.

From this frequently exemplified fact in practice, the conclusion has been deduced: that phosphorus injures to a great degree the tensile of cast iron. In the second button there could be distinguished, by means of a lens, parts of sulphurous crystallizations, and some crystalline particles showing very brilliant facets.

The Buttons from the two assays were pulverized and analyzed.

\* \* \* The following are the result of two analyses.

The experiment made with pyrites alone gave with 1.77 gram.

Sulphur not attacked by acids.....0.0150 gram.  
Sulphate of baryta 0.33, sulphur.....0.0455 "

0.0665 1.714 p. c.

The fusion made with pyrites and burnt bones gave with 1.77 gram.

Sulphur not attacked by acids.....0.0260 gram,  
Sulphate of baryta 0.23, sulphur.....0.0320 "

0.0529 1.486 p. c.

Loss of Sulphur.....0.0228 "

Another gray iron fused with pyrites alone and again with pyrites and burnt bones gave by analysis of two grammes the following results:

Fusion with pyrites alone. Sulphur.....0.0248 gram.  
" pyrites and burnt bones".....0.0291 "

0.0627 0.135 p. c.

On comparing the results of the analyses, there is found in the one case a loss of sulphur equal to 0.0228 p. c. of the weight of the iron, and in the other 0.135 p. c. in remelting with pyrites in the presence of phosphorus, since the two fusions of each iron were made in equal quantity of pyrites, and the loss of sulphur was greatest where the calcined bones were added.\* I think therefore that this loss of sulphur was owing to the com-

\* The sulphur in the first cast iron was not determined before fusion. It was but of little importance to know this quantity which was in proportion to the others in the two experiments of each iron. It was sufficient to know that it lost more by the addition of Phosphorus.

bination of a portion of this last, with the phosphorus introduced after fusion, these two bodies, in consequence of their great affinity, combining in all proportions to form some very volatile compounds.

To establish undeniably whether this probable combination had taken place, I made some reverse synthetic experiments; that is to say I remelted:

1st. 5 grammes of a gray iron with 0.20 of pyrites, 0.20 of calcined bones and 0.10 of clay.

2nd. 5 grammes of the same iron with 0.10 clay and 0.20 calcined bones, to see what became of the phosphorus after the second fusion in the presence of pyrites.

The two experiments gave me two buttons perfectly melted but entirely different in their external characters. The first, without being ductile, flattened slightly under the hammer before breaking; its fracture was not smooth and shining as that of the button resulting from the fusion with the burnt bones without pyrites.

This last on the contrary, was very friable, did not flatten under the hammer, broke at the first blow; it presented a perfectly smooth surface, was silver-gray, quite brilliant, without any fissure. Apart from its want of ductility it had many of the exterior characters of nickel.

So great a difference in the exterior characters of the two buttons was sufficient to make me believe in a loss of phosphorus through the presence of sulphur.

As a final test, I remelted again:

5 grammes of a gray cast iron with 0.20 of pyrites, 0.20 of calcined bones, and 0.20 of clay.

5 grammes of the same iron with 0.20 of calcined bones and 0.20 of clay.

Two grammes of each button from the fusion were analyzed.

\* \* \* \* \*  
Result of experiments with calcined bones gave phosphoric acid.....0.024  
Result of experiments with calcined bones and pyrites, phosphoric acid.....0.027

It is seen from the two results of the analyses, that the phosphorus did not disappear in the fusion of the iron in the presence of phosphate of lime and pyrites, whilst the analyses in the inverse experiments showed a loss of sulphur which evidently could not have proceeded from a volatile combination of sulphur and of phosphorus as was first supposed.

M. Gruner, Engineer in chief of the mines, my excellent professor to whom I am indebted for numerous useful councils in this memoir, advised me to take again the first two buttons and examine the carbon, to assure myself if it did not play an important part in the disappearance of the sulphur.

He had in fact remarked, in an assay by the dry way of ores highly phosphatic, that some isolated granules of the fused metal which had no magnetic properties, rose to the surface owing to their feeble density, and which were, doubtless, phosphuret of iron without carbon; for had they been other than this, they would have been simply a phosphatic cast iron which would have possessed the magnetic properties of the fused button.

Indeed it appears from the experiments which I have made, that phosphorus, tending to combine with the iron of the casting to form a phosphuret, replaces a certain portion of the carbon, which in its turn meets with sulphur from the pyrites and forms a sulphid of carbon independant of that which forms from the presence of pyrites alone without the concurrence of phosphorus.

TO BE CONTINUED.



## MONETARY AND COMMERCIAL

We have had another week of trying times since our last issue. There has been no new financial disaster to startle and alarm, but in times of such great commercial panic, the return of confidence is necessarily slow. The worst is probably over. Every indication would point towards a return of confidence. Gold is lower, exchange on the east is lower, produce is moving forward, stocks are recovering, and we have favorable news from Europe. In such a state of things, although we can not mark any decided improvement in the market for money here, we have every reason to look for a gradual but certain return of confidence. That it must be slow, is evident from the fact that the circulating medium of the country has been much reduced by the withdrawal of considerable currency that had hitherto represented the value of commodities. This, in the states which immediately affect our market, amounts to one-third. The hoarding of gold by the timorous will amount to the withdrawal of a much larger proportion of that article, so that we may safely estimate a decrease of at least one-third in the circulating medium. This will not be replaced until confidence is fully restored, and its return will be gradual.

The news from Europe which has been so anxiously expected, of the manner in which Europeans received the news of the suspension of specie payments here, is more favorable than was anticipated. The London Times says it is the most satisfactory announcement that could have been looked for.

Discounts are still very difficult. Paper is scrutinized with great care, and rates rule high. The regular houses are doing very little at 10 to 12 per cent. Outside rates range from 15 to 36 per cent., and in some instances higher.

Exchange in New York is from 1 to 2 premium. Philadelphia par to 1 premium. Baltimore from 1 to 2½ discount. New Orleans par to 1 premium. Gold is 1 to 2 premium.

Stocks are not quoted in our Market. What sales have taken place have been made at panic prices. A reference to the New York quotations will show a decidedly improved and active market there.

## SALES AT THE NEW YORK STOCK BOARD—Nov. 8.

1,000 N. Y. State 6s, 80'.	102
6,000 N. Y. State 6s, '61.	91
5,000 Ohio State 6s, '86.	92½
1,000 Michigan 6s.	85
9,000 Mississippi State 6's.	72½
2,000 North Carolina State 6's.	87½
1,000 Tenn. State 6's, '90.	84
500 Virginia 6's.	90
2,000 Illinois Central R. R. Bonds.	86
4,000 Terre Haute and Alton 2d mort. Bonds.	50
2,400 N. Y. Central 7's.	100
100 shares New York Central.	76½
346 " Pacific Mail St. Co.	67
181 " Del. & H. C. Company \$30.	100
390 " Cleveland & Toledo.	39½
393 " Chicago & Rock Island.	75
50 " Milwaukee & Miss.	26
150 " LaCrosse & Milwaukee.	93½
420 " Illinois Central.	95½
20 " Harlem R. R. stock.	6½
170 " Erie R. R.	16
200 " Reading.	29
65 " Mich. Cent.	38½
100 " Mich. S. & N. Ind.	20½
25 " Panama.	86½
100 " Galena & Chicago.	38

## T. F. RANDOLPH & BRO.

Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,  
Respectfully Yours,

D. M. CARHART,  
Box 1831, Cleveland, Ohio.

oc(29.6m

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE

# RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes Copying.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads coaling at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

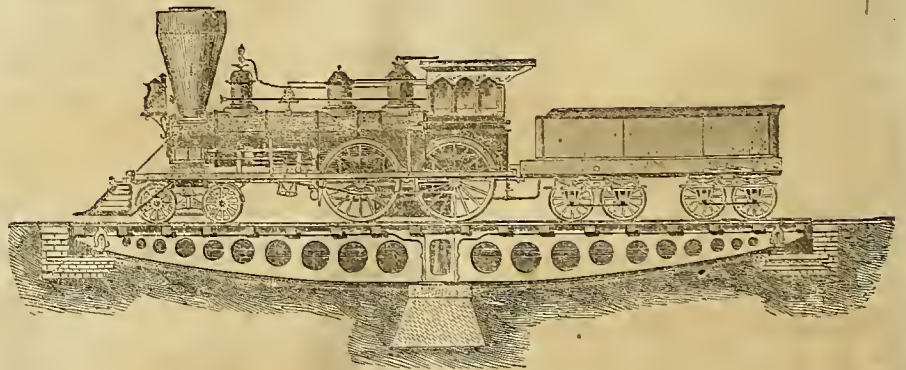
N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers & Co.

—LATE—

### BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING and SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

#### ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, Jr.



**WAREHOUSE**

No. 5 FRONT STREET,  
Opposite Public Landing,  
Cincinnati, O.

**PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."**

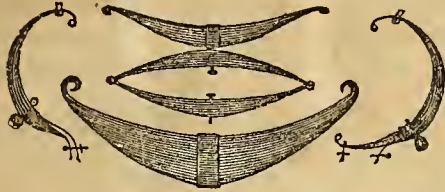
We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

**MCDANIEL & HORNER,**

LOCOMOTIVE AND CAR  
MOTIVE SPRING

**MANUFACTURERS, WILMINGTON, DEL.**

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.  
A. C. GRAY, Prest. New Castle Manuf. Co.  
U. WELLS, R. R. Car Manuf. Petersburg, Va.  
I. R. TRIMBLE, Supt. Philad. R.R. Co.  
May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.  
EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.  
THOMAS DOUGHERTY, Master Mach. do.  
THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

**ALBERT M. LEA,**  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

**New Works on Civil Engineering.**

THE Field Practice of Laying out Circular Curve for Railroads. By John C. Trautwine, Civil Engineer.—4th Thousand, in pocket-book form with tucks.

—ALSO—

A New Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Tables and 10 Engraved Plates of Diagrams. By John C. Trautwine, C. E.; 2d edition.

Price, one dollar each. Postage on the Curves, five cents; on the Excavations and Embankments, eight cents. For sale by

WILLIAM HAMILTON,  
Hall of the Franklin Institute,  
Philadelphia, Pa.

Sept. 21-3\*

**HOYT'S WATER GAUGE**

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,  
No. 66 Broadway, N. Y.

July 30

**RAILROAD IRON.**

1500 TONS best quality Welsh Rails, "Erie" pattern, 52 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

Feb 19 1m

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

**BUSH & LOBDELL,**  
Wilmington - - - - - Delaware.

MANUFACTURERS OF  
**CHILLED WHEELS**  
AND

**TIRES,**  
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO  
Execute Promptly Orders to any Extent  
FOR THEIR

**CELEBRATED WHEELS,**  
EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

**WHEELS FITTED**  
To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the  
Most Reasonable Terms.

ar23

**Harlan & Hollingsworth,**  
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
**MACHINERY.**

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

oc2

**Union Works, Baltimore.**

**POOLE & HUNT,**  
Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

**Steam Engines of any Size.**

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.  
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

**ANDERSON, GATES & WRIGHT,**  
STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.  
Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(Successors to JACOB ERNST.)  
112, Main Street, Cincinnati

**J. T. CRAPSEY,**  
ATTORNEY AT LAW,

OFFICE:  
N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

**SCHENECTADY**  
Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

**LOCOMOTIVE ENGINES,**

AND TENDERS, AND

**RAILROAD MACHINERY**

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

**JOHN ELLIS, Agent.**  
WALTER McQUEEN Sup't. Au16.17



**GENERAL  
RAILWAY SUPPLY AGENCY.  
SNOOK & HILL'S PATENT  
LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for building of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**  
Mechanical Engineer,  
AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

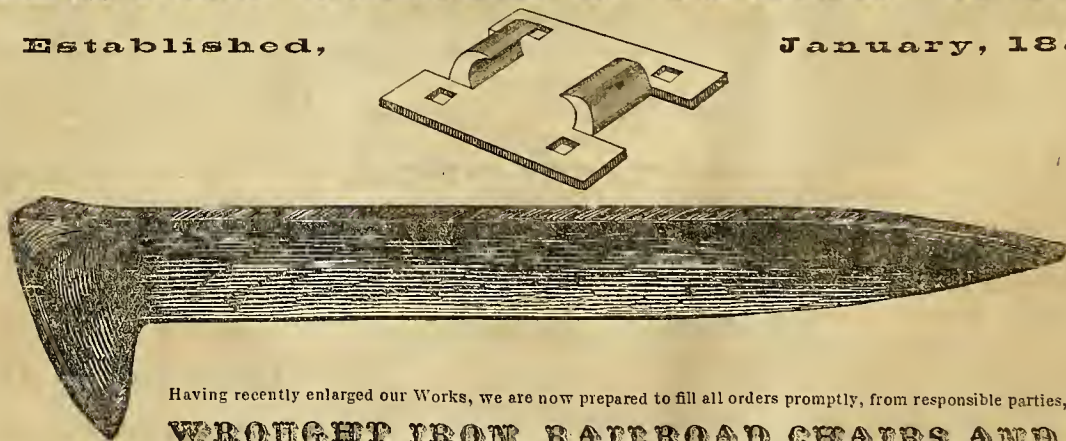
Entrance 5 Tryon Row.  
Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have to use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



Most Direct Route to the East.

# BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## - THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route. FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

# Terre Haute & Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT TERRE HAUTE WITH THE EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

Supt Terre Haute &amp; Richmond R. R.

## PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1857.

November 9.

1857.

# LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.



## EXCLUSIVELY AN EASTERN ROUTE.

### THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 8:30 P. M. Evening Express, through to Cellaire and Pittsburgh without change of cars.

### FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 4:40 P. M., for Springfield and Columbus.

This train also makes connections for Wilmington, Lancaster and Zanesville. This train stops at all points between Cincinnati, Springfield and Columbus.

**FOURTH TRAIN.**—Cleveland, Pittsburgh and Wheeling Night Express, leaves Cincinnati at 8:30 o'clock P. M., for all the Eastern cities.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

### FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House; or at the Old Office, south-east corner Broadway and Front, opposite Spencer House; or at the Eastern Depot.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent.

### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no 12

H. B. RUGGLES, Conductor.

# TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

# OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 15TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**Freight.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Om nibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Om nibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Om nibus L

Office No. 2 Burnet House.

an 2

# WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

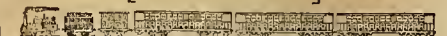
MIDDLETON, WALLACE & CO.,  
jan 8 1y 119 Walnut st., Odd Fellows' Building

1857.

Summer Arrangement.

1857.

# Cincinnati, Hamilton & Dayton [TRUNK LINE.] RAILROAD,



## FOR THE NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, ST. LOUIS, LAFAYETTE, LOGANSPORT, CHICAGO, BOSTON,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPORT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

“STEAMER BAY CITY.”

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.**

**BAGGAGE CHECKED THROUGH.**

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 12:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent,

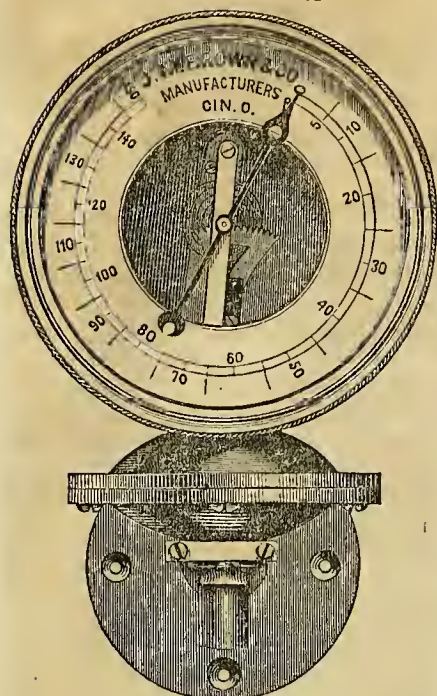
The Om nibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR

### LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.

250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

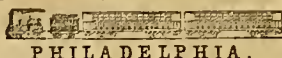
every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artisan wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of

**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,  
PHILADELPHIA.

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb 7, '56-2m.1

H. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,

NEW YORK,

## IMPORTERS

OF

**Plain and Figured Mohair Plush**  
Printed & Uncut do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;**

**Enameled Cloth, for seats & backs of Cars**

**ROPE MATTING, Every Width**

**Oil Cloths for Head Linings, Enameled with Gold and Silver;**

**DUCK CANVASS FOR CAR ROOFS;**

**Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;**

## PATENT FELT,

**FOR CUSHION & MATTRESS FILLING**

N. B. We have the Plush in hand for exportation  
sept 18 DOREMUS & NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor & Draftsman,  
CUMBERLAND, MD.

**RAILROAD** routes located, planned, and estimated  
Maps and Reports furnished; Researches made for  
Coal, Iron, Copper, Lead, or other Minerals,  
Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skillful artists. Mines explored, new Works laid off, and Geological plans prepared.  
mar 14 y

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

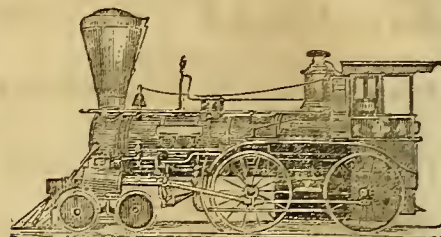
The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

Aug 14 1 y

P. DUDLEY,  
President of the Board,

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Sintering Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap 20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

**Wheels & Axles, Jaws Boxes, and Casting Fitted**  
**Wrought Nuts, Bolts, & Washers,**  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows, Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.

† oct 6.

## GEO. D. WINCHELL & BRO.,

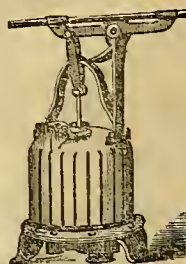
172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the lowest price.

THE HIGHEST PRIZE (The highest prize) awarded to the McGowan's Compound Steam Pumping Engine at the 1855 Fair, Ohio Mechanics' Institute. June 18, 1855 F1



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....NOVEMBER 26, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " per month .....	3 00
" " six months .....	12 00
" " per annum .....	20 00
One column, single insertion .....	4 00
" " per month .....	10 00
" " six months .....	40 00
" " per annum .....	50 00
One page, single insertion .....	10 00
" " per month .....	25 00
" " six months .....	110 00
" " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 40.

#### EDITORIAL.

Thirty-first Annual Report of the Baltimore & Ohio Railroad.....613

#### RAILROADS.

Manassa Gap Railroad Co.....614  
The Albany and Salem Railroad Case.....615  
Explosion of Railroad Boilers.....618  
Rome Railroad, Ga.....614

#### MISCELLANEOUS.

Researches upon the Influence of Sulphur upon Iron, and that of Phosphorus in Partially Neutralizing the Action of the Sulphur; by M. Janoyer.....619

#### MONEY AND STOCKS.

Sales at the New York Stock Board.....620  
Monetary and Commercial.....620

CHICAGO, ST. PAUL, AND FOND DU LAC R. R.—At the stockholder's meeting of the Chicago, St. Paul, and Fond du Lac Railroad Company, Chicago, on the 6th inst., the following Directors were elected:—Wm. B. Ogden Henry Smith, John P. Chapin, Chicago, Illinois; Charles Butler Wm. C. Langley, Jas. W. Hickok, New York; Wm. Jarvis, Middletown, Conn.; J. J. R. Pease, Jamesville, Wis.; A. L. Pitchard, Watertown, Wis.; Mason C. Darling, Fond du Lac, Wis.; G. W. Washburn, Oshkosh, Wis.; Perry H. Smith, Appleton, Wis.; Charles T. Harvey, Marquette, Michigan.

At a subsequent meeting of the Directors, the following officers were elected: Wm. B. Ogden, *President*. Charles Butler, *Treasurer*. J. W. Currier, *Secretary*.

DAMAGES FOR INJURIES.—The Court of Common Pleas, St. Louis, recently awarded a verdict of \$2,050 against the Missouri Pacific Railroad, in favor of James McDermott, for injuries sustained by the Gasconade tragedy.

### THIRTY-FIRST ANNUAL REPORT OF THE BALTIMORE AND OHIO RAILROAD CO.

Regarding the Baltimore & Ohio Railroad, as one of the most important in America, and one of the best tests of the practical results of railroads in this country, we have taken the occasion of its previous Annual Reports to review them at length. We shall do so with this.

1. The Board Report an increase in its receipts of \$231,067, over those of the preceding year, and of \$905,545 10 over those of 1855. We are inclined to look upon this result, even more favorably than do the Directors. In 1856, the crop of Indian corn in Ohio was *thirty millions* of bushels less than that of 1855; and of wheat, *six millions* less! This great deficiency of crops over those of 1855, could not have been confined to Ohio. It must have occurred in nearly equal proportion throughout the West. If so, the deficiency in the *surplus* of grain in the West, must have been equal to at least one hundred millions. In this deficiency—as felt in freights—Baltimore must have shared as well as New York, and Philadelphia, and New Orleans. If, with such a fact bearing on its business, its receipts have still increased, we think it a most favorable indication of its future prosperity. The receipts in money have now reached \$4,600,000, and we hazard nothing in saying, that its income will reach \$6,000,000 within three years from this date.

The *freight business* is, as must necessarily be the case, derived chiefly from the West. The great bulk of flour, lard, whisky, oil, pork, bacon, etc., is shipped from the neighborhood of Wheeling, and most of it probably from Ohio. This class of freight will increase immensely. Baltimore is the nearest shipping point from the West, and large numbers of Railroads in Ohio, Indiana, and Illinois concentrate on the Central Route, and in time, custom, as well as interest, will come in to increase that tariff.

The following is a tabular view of the shipments of flour. It will be seen that the shipments from the Ohio River amount to 426,600 barrels, while those from all other points come to 365,120.

Statement exhibiting the quantity of Flour transported during the fiscal year ending 30th September, 1857, viz:

	Wheeling.	Benwood.	Moundsville.	Parkersburg.	Way Points.
October, 1856...	3,853	30,184	4,076	.....	38,805
Nov., " ..	5,397	45,600	6,764	.....	35,085
Dec., " ..	12,496	42,101	7,744	.....	47,944
Jan., 1857...	450	30,400	493	.....	20,040
Feb., " ..	4,698	12,685	2,810	.....	33,419½
March, " ..	5,460	15,506	2,989	5,068	50,146½
April, " ..	3,640	15,912	736	8,263	31,137
May, " ..	1,655	12,252	100	1,417	21,346½
June, " ..	2,011	11,178	106	2,024	15,236
July, " ..	811	12,401½	69	6,804	16,223½
August, " ..	1,734	10,923	960	18,666	23,987
Septem., " ..	4,573	34,658	3,780	33,280½	28,670½
	46,778	273,810½	29,790	76,422½	365,120½

Total as above brought to Baltimore City over the Main Stem, including North-western Virginia Road.....791,921½ barrels.  
Add from Washington Branch.....25,515 "

Grand Total.....817,436½ "

The *through* passengers have increased considerably since the opening of the Marietta Road. The whole number of through passengers is 38,000. Some three years since, the whole number was 14,000. To make the Baltimore & Ohio Railroad a through route, on a large scale, it is only necessary to complete the connection with the Marietta Railroad. Whatever may be thought of it, the interests of the Marietta and the Baltimore Roads are identical, and the managers should so consider and treat them. The nine mile voyage now, and the Rail-stairway near Marietta, are now very decided obstacles to a quick and comfortable passage. The connection should be direct, and a bridge built over the Ohio, as soon as possible.

The passenger traffic is exhibited in the following table:

Westward to all points beyond termini of the Road:  
From Baltimore and Way Stations.....11,988

First Class.....8,004  
Second Class.....467  
Emigrants.....3,517

11,988  
From Washington.....4,965½

First Class.....4,943  
Second Class.....22½

4,965½  
From Philadelphia.....3,380

First Class.....2,681½  
Emigrants.....698½

3,380  
From New York.....3,517½

First Class.....2,921  
Emigrants.....596½

3,517½  
Total number of Through Passengers westward.....23,851

Eastward from all Western points beyond the termini of the Road:

To Baltimore and Way Stations.....5,321  
" Washington.....3,669  
" Philadelphia.....2,512  
" New York.....2,883

Total number of through Pass'grs Eastward.....14,385

Total Through Passengers.....38,236½

### MAIN STEM SUMMARY.

	Passengers East.	Passengers West.	Total Passengers.
Local Travel.....	133,364	183,807	317,171
Through Travel....	14,385½	23,851	38,236½
Total.....	147,749½	207,658	355,407½

The entire tonnage of the Baltimore and Ohio Railroad amounts to over 850,000 tons. More than half of this is coal, which amounts to 490,000 tons.—The next heaviest item is Flour, which comes to about 80,000 tons,—which is equivalent to 4,000,000 bushels of wheat.—The next item is pork and bacon, 26,000 tons; 20,000 tons of whiskey, equivalent to 150,000 barrels; live stock makes another large item.

The quantities of Groceries, &c., sent West over the road are very great. The following are the amounts of certain articles received at the Ohio river, from the East:



Coffee.....	21 518,760 lbs.
Sugar.....	6,050,280 "
Molasses.....	2,947,350 "
Dry Goods.....	48,648,080 "
Oysters.....	1,198,310 "
Drugs, Oils and Paints.....	988,230 "
Groceries.....	43,568,630 "
Guano and Manures.....	12,326,000 "

Baltimore has long been a principal point for the distribution of coffee, and its trade with the West is, as seen above, very large. In this article on the subject of *fuel*, we find a very interesting paragraph in this report. The time is coming, when it will be a most important *desideratum* to burn coal in locomotives. Though wood is abundant in the country,—yet wood, *on the line of the road*, is continually diminishing, and will soon be scarce. Coal can be used in locomotives and surely, there is genius enough to adapt locomotives to its use. The experiment on the Baltimore road seems to have been very successful. The following is the paragraph, to which we refer :

The subject of economising in the use of fuel for the passenger locomotives, had enlisted the attention of my predecessor, the late Mr. Done, who instituted a series of investigations and experiments, under the personal charge of Mr. Thomas Winans,—then a Director of the Company,—and afterwards of Mr. Mendes Cohen. These trials were directed to the substitution of coke,—made from the semi-bituminous coal, from the George's Creek Valley,—for wood, and though demonstrative of the feasibility of the idea, it was found that the engines then in use were not sufficiently well adapted to the change to secure the desired results.

The Company having ordered new passenger locomotives, of the first class, some months since, provision was made in their construction for the consumption of coke, should renewed trials further prove its advantages. During the past two months several of the new engines have been testing this fuel, under the direction of Mr. Henry Tyson, the Master of Machinery, and with very promising results.

If continued experience should confirm the present promise, a valuable improvement will be secured, attended with desirable advantages to the road,—in freedom from smoke, sparks, &c.,—besides a large saving of expense in the chief item of cost in the running of the passenger trains.

ROME R. R., GA.—The following gentlemen have been elected Directors for the ensuing year: William R. Smith, John P. King, Wade S. Cothran, Alfred Shorter and John P. Eve.

At the same time it was agreed on, to open Books for an additional subscription of Stock in said Company, for the purpose of laying down heavy iron. Said books will be open in the Superintendents Office, and the citizens of Rome and vicinity generally are invited to subscribe.

W. R. SMITH, President.

LEBANON BRANCH R. R.—The completion of this road was celebrated by an excursion last week.

## Railroads.

### MANASSAS GAP R. R. CO.

The President and Directors of the Manassas Gap Railroad Company, respectfully present to the Stockholders, this, their seventh annual report :

The Railroad year ending 30th September, 1857, is the first twelve months run of the road to Woodstock.

The receipts of the road from freight, mail and passengers for the year amount to \$131,835 70 which by \$3,921 46, the receipts of the year preceding; but the consequence of increased expenses, growing mainly out of increased length of road, the net earnings of the road fall short of those of the preceding year by the sum of \$764 61. The balance of the year 1856, after deducting all working expenses from the gross receipts being \$38,943 12, whereas that of the year 1857 is \$38,178 51.

Investigation will show that this statement does injustice to the effect of the extension of the road to Woodstock. A more proper view of its value is exhibited by the fact that the increase of receipts from freight on line west of the mountains exceeded receipts on same account of the year preceding by the large sum of \$18,210 45, which was unfortunately effected by decrease on line east of the mountains, amounting to \$15,850 10, so that had the Piedmont county maintained its accustomed yield, the return would have given a balance of \$54,028 01, instead of \$38,178-51, as stated.

The most striking instances of falling off are wheat and guano.

In the months of August and September, 54,740 bushels of wheat less were brought over the road, and in the year against 2007 tons of guano, for the year 1855-'6, only 464 tons were transported last year.

The salaries of the President, Treasurer, and Chief Engineer are not included in the account of running expenses, because deemed more properly belonging to construction account; but the prosecution of the work being now suspended, their salaries, \$5,000, is a charge upon the running department.

The broken bridge, also, the cause and cost of which is stated in report of superintendent, is excluded from the statement, because, in its nature, it was accidental.

Exhaustion of funds compelled the board to suspend the prosecution of the work on the Loudoun branch and Independent line in the month of May.

The work of the two lines is a little more than half done, but in separate sections. Four hundred and seven thousand six hundred and sixty-nine dollars have been paid on account of graduation and masonry—\$393,000 wanted for the completion of the same.

Under the same imperative necessity the work upon the Valley line was arrested in the month of June.

Upon this line the road is ready for the superstructure as far as Mount Jackson, which is midway between Strasburg and Harrisonburg. The first completed 25 miles, exceeds the other in cost and difficulty of construction. Of the incomplete 25 miles, lying between Mount Jackson and Harrisonburg, nearly one-third of the work is done, all lying in Rockingham county, and the part done comprised work, (with the exception of one short point,) which required length of time to complete.

For the completion of the graduation and masonry to Harrisonburg, \$250,000 will be required, a considerable portion of which is in the hands of the company in shape of county Bonds, company Bonds, Stock, and undrawn subscription of the State.

The receipts from capital stock and money borrowed, amounting to \$3,148,707 75, have been expended on road, of which 72 miles is completed and equipped, 12 miles now ready for the superstructure and remaining portions nearly one-half done, making a total of 170 miles, a length of road not surpassed by any in the State except the Virginia and Tennessee.

The Company now find itself stalled and embarrassed with a debt incurred in the prosecution of this work, though the debt is small in comparison with the amount invested.

If the debt were funded it would give no trouble; but a floating debt payable on demand or at short periods, involves a responsibility, which in utter prostration of credit like the present, carries with it profound anxiety, and acute apprehension.

The Debt of the Company amounts to.....\$625,000  
Viz : Funded Debt.....175,000  
Floating ".....520,000

The floating debt rests upon the collateral securities of the Bonds of the Company at a wide margin. Rockingham Bonds [\$51,500.] Corporation Bonds of Alexandria [\$26,000] and two drafts of the B. of W., [\$45,000] payable when authorized by the Legislature.

This debt is due to Banks and Bankers on bills payable and on open account.

The interest on the debt is equal to the interest on the whole issue of Bonds, viz : \$1,000,000.

The floating debt is chargeable to the expenditure on line from the mountain to Strasburg and superstructure on line to Woodstock, to which, as has been repeatedly stated to the Stockholders, there never has been any fund applicable.

That the debt was not contracted on account of the Loudoun Branch or Independent line, is made evident by the fact that rather more money has been received than paid out on account of these lines.



The account of receipts and expenditures upon the graduation and masonry of the Valley Line, to which the subscriptions in those counties were confined, also squares. The Funded Debt, with small exceptions, to contractors, were paid out to the Valley Line, and for equipment. That portion of the work, viz: Line from mountain to Strasburg and superstructure on line to Woodstock is chargeable with the Floating Debt.

The indebtedness of the Company, upon getting to Strasburg was stated to be upwards of \$250,000; subsequent development having expanded it to \$300,000. The statement then will be,

Debt on line to Strasburg in '54.....	\$300,000
Debt, on Woodstock 1854.....	110,000
Interest paid by Company.....	11,000
	<hr/> \$520,000

The propriety of contracting this debt grew out of the necessity of completing the road to Strasburg, upon which rested the whole policy of the Manassas enterprise; and finding the road at Strasburg fail to command the trade of the Valley, the same object made it necessary, to bring the line into, or as far as Woodstock.

There being no question of the propriety of contracting the debt, the inquiry remains whether the Board have used all proper and diligent means to relieve the Company from distress by converting the Floating into a Bonded Debt.

With the completion of the road to Strasburg occurred the Financial crisis of 1854, which brought State Stock suddenly from \$1 08 to 87, of course leaving no market for Railroad Bonds. With the amelioration of the market, a correspondence was opened through a house in New York with a house in London, which was actively prosecuted for more than a year, and not coming to a satisfactory result, a gentleman of this city, every way competent, was sent by the Board to England, who returned in August with the statement that the Bonds were so placed that they would be sold if any American securities were sold. Unfortunately his return was quickly followed by a sudden reverse in the money status of the world, which closes the door of hope—upon sale of bonds.

A sale of Bonds at a very low rate might have been effected, and the sale might have been better for the Company than its present condition, but with the universal expectation of abundance of money and chances of legislative assistance, such a depreciation of the Bonds would have been generally condemned.

The Company finds itself in debt at a time when a hurricane blows upon credit everywhere—it must face this storm and depend upon its own strength to weather its ravages.

The first danger which must be met arises from the position of the bonds held as collateral security. Should creditors sell these

bonds, the bondholders, in the default of the payment of interest, have, under the Mortgage Deed, the authority to sell the road itself. It is therefore incumbent to see to the ample protection of the road against such a catastrophe, by providing for the certain payment of the interest. The interest on the floating debt being about the same as that of the whole issue of bonds; the same amount will accomplish both ends.

To raise the sum wanted for interest on the debt, will require a larger per centage of increase of charges for freight on toll sheet, than that which has been made by our neighbors, the Alexandria and Orange Railroad Company, which, in the report of this Board, is put by the President at 20 per cent. will be necessary on the part of this company. If the raising of rates for the object of extending that road to Lynchburg has been cheerfully submitted to on their part, a higher one rate will be readily acquiesced in by the stockholders of this company for the purpose of keeping their property in their own hands; for should the Bond holders sell the road, it will fall into hands, which will have a single eye to the greatest profit, and will study the single question of how much can be made out of the property.

Profoundly grateful as this company feels to its great patron, the State, and hopeful as it is that the Legislature will give the aid which in its wisdom and in its justice to its own credit it may, yet this company ought, and must put forth its own energies, as far as in it lies, with the more confidence of Legislative aid because it has done so.

This work must stand still under the paralysis which ties down enterprise throughout the land; it stands, however, upon the common platform of the unfinished work of the Commonwealth—all dependent upon State aid to move forward to completion; but with even partial aid from the State, it can be put on a footing which will finally work out all the ends destined in its charter.

By order of the Board,

E. C. MARSHALL, President.

#### NEW ALBANY AND SALEM R. R. CASE.

UNITED STATES CIRCUIT COURT—INDIANA.  
Before Justice McLEAN, at Chambers.—  
October, 1857.

D. D. Williams vs. New Albany and Salem Railroad Co.

A Receiver will not be appointed, as a matter of course, on a default of paying interest or principal.

Such an appointment is made the exercise of the discretion of the Court, as equity may require.

Where an expenditure has been made of the current income of the road, and considerable debt incurred in completing the road and equipping it, under the advice of the Trustee and a considerable number of the bondholders, such use of the funds will not be considered a misapplication.

It greatly increased the security of the

bondholders, and added to the profit of the road, and these facts, under the circumstances, do not authorize the appointment of a Receiver.

The Court entered an order on the Railroad Company to make monthly reports to the Court of receipts and expenditures of the road, and after the first of January next to pay one-half of the net receipts into Court, in discharge of the interest; and the other half to be paid in discharge of the floating debt.

Court will not order the payment of interest unless the coupons shall be presented.

Messrs. Stanberry, Ketchum & Lane, for complainant; Messrs. Smith, Crawford & McDonald, for defendant.

#### OPINION BY THE JUDGE.

In his bill, the plaintiff states that the defendant owns, and has in operation, a line of railroad commencing at New Albany, on the Ohio river, extending thence to Michigan City on Lake Michigan, 288 miles; also a branch of said road, not yet in operation, extending from Gosport, in Owen County, to Indianapolis, of the length of 43 miles. That in connection with the road and branch, the Company has in use a large amount of rolling stock, consisting of a large number of locomotive engines, cars, and machinery; also various other property necessary to equip said road for a successful operation in the transportation of passengers and freights; with corporate powers to regulate the same, charge freight and passage money; which machinery in its operation is so combined as not to admit of a separation, on which account the complainant prays that the same may be sold or otherwise disposed of as an entirety, and in such manner that all of said corporate franchises may pass and vest in the purchaser or purchasers, as a body corporate, to be held and used and carried on, and subject to be sold again in the same manner, and subject to the same restrictions.

The complainant further states that the said Company, the 8th day of February, being engaged in constructing that part of its railroad which lies between New Albany and Gosport, 112 71-100 miles, and being in need of money to build the road and property to equip it, resolved to borrow \$500,000, to be secured by certain bonds, of \$1000 each, payable semi-annually in the city of New York, at 10 per cent. per annum, subject to a clause that the holders thereof should have the right to exchange them at par for stock. That to secure the payment of said bonds, a deed of trust was executed, which the complainant holds, whereby the Company granted, bargained, and sold to the complainant and his successors in the trust created, all the following then present, and then in the future to be acquired property of said Company, pertaining to that part of the road which lies between New Albany and Gosport, to wit: the road made and to be made, including the right of way, and every description of property which pertained to the road, and which the Company might acquire, on the following terms:

If the Company should fail to pay the principal or any part thereof, or the interest, or any part thereof, on the bonds when the same might become due, when demanded, then, after sixty days from such default, upon request of the holder of such bond, the complainant, or his successor in the trust, should enter into and take possession of all and every part of said premises and property, and as the attorney in fact or agent of the Com-



pany, by himself and agents or substitutes, duly constituted, have and employ the same in making all needful repairs, alterations, and additions thereto; and after deducting expenses of such use, repairs, alterations, and additions, apply the proceeds thereof to the payment of the principal and interest of all said bonds remaining unpaid. Or the complainant, or his successors in said trust, at his or their direction, might, on the written request of the holders of at least one-half of the bonds then unpaid and unconverted into stock, cause the same premises, or so much thereof as should be necessary to pay the principal and interest of all the bonds then unpaid, to be sold at public auction in the city of Albany, in the State of Indiana, or in the city of New York, giving at least forty days notice, etc. The bonds were duly executed, and the money loaned on the faith of the security, etc.

And the complainant says that the Company paid the interest which became due prior to the 1st of February, 1857; that the interest which became due on that day they failed to pay, and that the whole of the coupons for the instalment of interest which fell due on that day are unpaid, amounting to the aggregate sum of twenty-five thousand dollars, more than sixty days after the maturity of the coupons having transpired. After this, the holders of a large number of said bonds required the complainant, as trustee, to enter upon and take possession of said mortgaged premises; and other holders of said bonds, to an amount exceeding one-half thereof, requested the complainant, in writing, to proceed according to the terms and conditions of said deed of trust to make sale of the mortgaged premises; but he deemed it inexpedient to do so.

And the bill states that several other loans were made, of large amounts, at different rates of interest, by issuing and selling bonds secured by deeds of trust on the property of the road, on the same conditions as those specified in the first mortgage. On all of which subsequent loans the interest has become due, and remains unpaid. He has not entered upon the property, as above requested, to sell the same as authorized by the deeds of trust, because he says the Company is much embarrassed in its affairs, being largely insolvent, and owing a large, floating, unsecured debt. That many of that class of creditors have prosecuted suits and judgments against the Company, and are seeking to enforce satisfaction by the seizure and sale of the property, on the road, etc.

That by reason of the promises, it is indispensably necessary to sell and dispose of said mortgaged premises, to the end that the proceeds may be applied as contemplated by all the deeds of trust.

All interest due prior to the 1st of February last, has been paid; but that which became due on that date has not been paid, and for this default the bill was filed.

Several objections are taken to the bill for want of jurisdiction; and if this clearly appears from the face of the bill, the motion for the appointment of a Receiver on that ground must be overruled.

It is objected that the citizenship of Brooks and Anderson, who are made defendants, is not alleged in the bill. In answer to this it may be said, if they are corporators, they are before the Court and are liable as such; and if they are sought to be made liable in their individual capacity, it appears, from the papers in the case, they are citizens of Indiana,

and the bill may be amended by adding an allegation of their citizenship.

It is also objected to the bill that the bondholders, who have conflicting interests, are not made parties.

Where the trustee has legally and permanently the possession of the fund, it may not be necessary to make the *cestui que trusts* parties. But where parties occupy the relation of lenders and borrowers, as the bondholders and the Company, they should be made parties, if practicable. In such case, any conflict of interest which may arise, between the bondholders or between them and the Company, would require the bondholders to be parties.

But this may be subject to the general rule adopted by courts of necessity, where the parties are too numerous to be brought into court, a part may sue for the whole; or where some being beyond the jurisdiction of the Court, cannot be reached by its process, and refuse to make themselves parties, in most cases the jurisdiction of the Court may be exercised between the parties before it.

But for the purposes of the present motion, this defect in the bill is not material. Should a sale of the premises be ordered, the question will become important.

It is again objected, as the complainant, under the trust deed, has power to take possession of the property, this proceeding in chancery is unnecessary and ought not to be sustained.

If this exercise of power under the deed be admitted, it is not perceived that it may not be waived.

The objection of usury may be more properly examined on the demurrer or answer, in the further progress of the case.

To strengthen the application for a Receiver, the affidavits of Mr. Lane, the counsel, and Mr. Williamson, the trustee, are filed, and the last report of the Railroad Company.

Mr. Lane states he lately visited New Albany, in Indiana, where the principal office of the company is established, and he says that he found the financial condition of the company exceedingly poor; that the laborers on the road had not been paid their wages for a long time, and that there had been a strike, &c.; and he proposed to the company that the laborers should be paid out of the first net earnings, and that the property of the road should be given up to the Trustees, &c., but the President of the company rejected the proposal.

The affidavit of the complainant corroborates, in some degree, the facts stated by Mr. Lane in regard to the embarrassed condition of the company, founded upon the representations made to him; and he says that the interest has not been paid, as alleged in the bill, and that the bill is true. And he says that the company, in his opinion, are by no means able to pay the amounts due and to fall due on their various issues of bonds; that the property of the company is jeopardized by a large and constantly increasing floating debt; and that a very large number of those holding bonds of the company, issued under the various mortgages, of which this deponent is trustee, have served on him a written request, according to the conditions of the mortgages, requiring him to cause the said road and its various appurtenances to be sold according to the terms of the mortgage. In the deed of trust it was required that at the written request of the holder of at least one-half of the bonds then unpaid, he shall cause the premises to be sold." The words used in the above affi-

davit are not equivalent to the requirement of the deed. But the bill alleges, in the words of the deed, that the request was made by at least one-half of the bondholders, and the complainant swears to truth of the bill.

James Brooks, President of the Railroad Company, filed an affidavit which admits the execution of the mortgages, and the issue of the bonds as stated by the complainant; but he says the proceeds of the sale of the bonds, the stock subscriptions and other means of said company, were insufficient to finish and equip the road for business; and it became necessary to have other means to finish the road, and put it in such condition as would enable the managers to earn the necessary amount of money to pay the principal and interest of its debt.

At that time the railroad securities had got in such bad repute that it was impossible to borrow on the sale of bonds, except at such a sacrifice as would be ruinous to the company. The company was reduced to the alternative of abandoning the road in an unfinished state, which would have caused an almost total sacrifice to the bondholders, or to state the difficulty frankly to such of the bondholders as could be seen, and to go on and use the net earnings of the road with such other means as the company could command, and finish and equip it.

He further says that he saw a large number of the bondholders from time to time, in his visits to New York, and with whom he was in correspondence, who were fully advised of these difficulties; and they uniformly advised him to go on by all means and finish the road, and relay the flat bar track in good order for running, so as to pay the debts of the company. The deponent believes, and the complainant and bondholders expressed to him the belief, that, but for an unlooked-for loss, by the failure of the crops of 1854 and 1855, the road could not only have been finished and put in good order, but the floating debt paid off, and the interest paid on the bonds.

He denies that there has been the misapplication of a dollar of the funds of the road.

There are some judgments against the road for claims of damages for the right of way, where the parties refused to abide by the awards made; but with the exception of this class of claims, there are few, if any, judgments against the company, and there never has been two hundred dollars worth of property of the road sold on execution. The net earnings of the road for the present year have been expended in paying for labor and materials, and in constructing and operating said road, and re-payment of money thus expended.

He says and believes that the road and appurtenances are more than sufficient to pay all of its debts, and that the security in the bonds has been increased nearly fifty per cent. since the first three millions of its bonds were negotiated. The deponent states that many of the bondholders and others competent to judge, who have examined the work, expressed the opinion that more work had been done, in the construction of this road, than on any other road for the amount of money.

The United States engineers and the engineers of the State of Indiana estimated the cost of this road from New Albany to Crawfordsville, a distance of 160 miles, at \$16,000,000, which has been built by the company for less than \$5,000,000. And the entire cost of the road from New Albany to Michigan



City, 280 miles, has been constructed for about \$7,500,000.

The managers of the road felt safe in assuring the laborers on it that they would be paid, as the work was not only done with the knowledge, but at the repeated and urgent request of the complainant, as well as a large number of the bondholders, with whom deposit from time to time came in contact.

The floating debt of the company on the 1st of October, 1857, was about the sum of \$235,000, which shows a reduction of \$45,000 since the 1st of July last.

In the year 1855 the net earnings of the road amounted to the sum of \$372,402 25. This paid \$315,256 59, the interest on bonds, and left a surplus of \$56,125 36. The gross earnings of the six months preceding Jan. 1, 1857, amounted to the sum of \$413,666 66, which left a balance, after deducting all expenses during the same time, of \$190,531 70.

The gross earnings of the road ending June 30, 1857, amounted to the sum of \$686,818 72, which, after deducting the expenditure for the same time, left the net earnings \$268,090 95; and this, the President of the road says, is \$200,000 less than the sum estimated, which was caused by the failure of all the great staples of the country in the year 1856, reducing the amount of transportation, as is supposed, to that amount.

The interest now due is about \$273,000, which sum, together with the floating debt and the accruing interest, may be provided for and paid, under prosperous circumstances, in a reasonably short time. After the payment of the floating debt, it is not doubted that the accruing interest will be punctually discharged if no untoward circumstances should occur.

The case made in the bill is, the failure to pay the interest on the bonds in February last and the embarrassed condition of the Railroad Company.

It seems to be considered that a receiver will be appointed, as a matter of course, under the mortgage where a default has occurred in the payment of any part of the interest or principle. If this be so, the Chancellor, in such a case, can exercise no discretion. He can do nothing less than carry into effect the conditions of the bonds.

It is not the province of chancery to enforce penalties, but to relieve against them. It is asked may the court disregard the contract of the parties? Certainly not. But where there is a hard and unconscionable contract, a Court of Equity will withhold its aid and leave the party to his remedy at law. An individual promises to pay, on a certain day, \$1,000, and in default thereof, to pay \$2,000. Would not a Court of Chancery relieve from this penalty? And the payment of the penalty is the contract of the party. What penalty could be more disproportionate to default, than the one under consideration. A failure to pay any part of the instalment of interest, subjects the company to the immediate payment of several millions of dollars, not payable except under the default, for many years; and the same default subjects property to the amount of several millions to a sale at auction, on a short notice.

The appointment of a receiver, when directed, is made for the benefit of all the parties interested, and not for the benefit of the plaintiff, or one defendant only. (2 Story Eq., sec. 829.) The appointment of a receiver is a matter resting in the sound discretion of the Court. (Skip. vs. Harwood, 5 Atatte 564.)

In such cases Courts of Equity will pay a just respect to such legal and equitable rights and interests of the possessor of the fund, and will not withdraw it from him by the appointment of a receiver unless the facts averred and established in proof show that there has been an abuse or a danger of abuse on his part. For the rule of such Courts is not to displace a bona fide possessor from any of the just rights attached to his title, unless there be some equitable ground for interference.—(Tryon vs. Fairclough 2, Sim & Stuart 142, 2, Story's Eq. sec. 835.)

It is true that parties in the contract, under consideration, agreed that a default in the payment of any part of the interest or principle, when payable and demanded, should incur the penalty sought to be enforced. Yet when the aid of a Court of Equity is invoked it will look into the facts and exercise an equitable discretion. And if the party claims and attempts to exercise the powers given him in the contract, which, under the circumstances, are unjust and ruinous, he may be enjoined.

Has there been any abuse of their powers, or misapplication of their funds by this Company which authorizes the appointment of a Receiver.

This step is to be taken by the bill, with the view of selling the entire road, and all its appurtenances, for the benefit of the bondholders.

The interest due in February last has not been paid, and since that time another installment of interest has become due, which has not been paid. All previously accruing installments of interest were paid or satisfactorily arranged. And the late large outlay for the completion of the road and its equipment was not only approved by the complainant and many of the bondholders, but they urged the President of the company to go on with the work by all means, and finish and equip the road, so as to increase the revenue, and they agreed to receive bonds in payment of the interest now due.

Under the influence of this encouragement, it seems the company prosecuted the work and completed the road, which is now in successful operation. In this way, as appears from the affidavits, was every dollar of the floating debt complained of created. It went to increase the securities of the bondholders by adding to the value of the road, and increasing the tolls for the payment of the interest and principal. But this is now insisted on as a misapplication of the road, which not only authorizes, but requires the appointment of a receiver.

But this does not, in my judgment, evince bad faith on the part of the company, but on the contrary, showed a laudable desire to save the bondholders, and all the parties interested, from loss.

Had the road been in the hands of a receiver, no chancellor fit to deal with these subjects, it appears to me, could have hesitated to order the receiver to do, in this respect, what the Company has done. In the deed of trust it is specially provided that the Trustee, if he take possession of the road, shall make repairs, additions, etc., and an offer is now made to pay this floating debt, so far, at least, as laborers are concerned, if the road be given up by the Company. Whether the debt be due to laborers on the road or to others, is not material, seeing it was incurred under the urgent request of the Trustee and several of the bondholders, and for the preservation and life of the road.

When property is purchased and placed upon the road, no lien being taken by the seller, it becomes subject to the mortgage lien on the road, so that it is not liable to an execution, except under the mortgage; and existing lines on the road, under the mortgages, can only be adjusted by a court of equity.

But it is said the complainant and a part of the bondholders had no power to authorize the new expenditure in the completion of the road. Such an authority as was exercised will be respected and sustained by any Chancellor, at least so far as to relieve the Company from any penalty or charge of misapplication of the funds of the road.

By what authority does the complainant sue in this cause, and claim a right to have equities adjusted between parties who claim conflicting interests? But in a matter of this kind, so essential to the interests of the bondholders, there can be no difficulty in sustaining the Company, as above stated. But still the default is admitted, and the failure to pay occurred under the circumstances stated; and the question now is whether this default requires the appointment of a receiver, and a discontinuance of the agency which now controls the road; and this is to be done preparatory to the sale of the entire property of the road.

The bonds will not be due and payable for many years. They who made the loans looked to the interest, and the ultimate payment of the principal.

This procedure involves some fourteen or fifteen millions of property—the property of the railroad and of the bondholders. Care should be taken in this case, as in all others, to administer equity, without, if possible, a sacrifice of property.

From the exhibits in this case, there is a reasonable probability that, in the course of a short period, a vigorous operation of this road may enable its directors to pay the deferred interest and their floating debt; and the discharge of these will make the payment of the current interest on its bonds easy out of the net profits.

If there were no other interests involved than that of the bondholders, such a course in so strongly recommended, by equitable considerations, that no intelligent holder of such securities could object to it. The floating debt has accrued under circumstances which give a strong claim to the Company for some indulgence in the payment of the deferred interest, seeing the completion has added so much value to the security of the bondholders and increased the profits of the road; and especially as the work was done on the recommendation of the complainant, and a part of the bondholders.

So far as the conduct of the Company has been developed in this somewhat informal examination, it is entitled to the highest commendation for its firmness, energy and success in the accomplishment of this great work.

There is a strong probability that in a very short time the road will be in a condition to meet its engagements under the mortgages which is all the bond creditors have a right to demand.

No change of agency could increase, I am convinced, the efficiency of that already employed on the road. A sale of the property would in all probability sacrifice the stock of the road amounting to between two and three millions of dollars, and more than half if not two-thirds of the property bondholders. It



might enable some one or more persons to purchase the road at an almost nominal consideration. These consequences, I admit, are not to stand in the way of an equitable right, enforced under circumstances of fairness and justice. But if such results may be avoided by a short postponement of the interest, and under a prospect of speedy payment, I hold myself authorized to do so under the facts above stated.

But I will afford to the bondholders every reasonable assurance that can be required. I will admit an order to be entered that the motion of the complainant for the appointment of a receiver be denied, and that the said Company, from and after the first day of January next, set aside one-half of the net earnings of the road, for the payment of the interest of the bonded debt of said Company—the other half to be applied to the payment of the floating debt of the Company—a report of the gross and net earnings to be made to the Court monthly by the Secretary of the Company; that is for the month of January, and at the close of the succeeding months, so soon as the returns can be received and made out—half of the net earnings to be paid into Court for the bondholders. The Company will report, also, in the Court, how the net earnings have been expended from the first of November to the first of January aforesaid.

But nothing in this order is to be understood as preventing the plaintiff from renewing his motion for a receiver at any time prior or subsequent to said first of January, upon any new statement of facts which he may be able to present.

The interest is payable on demand. If the bringing of the action be considered a sufficient demand, the coupons must be presented and filed, if payable to bearer, before payment will be ordered.

[American Railway Times]

#### EXPLOSIONS OF LOCOMOTIVE BOILERS.

The construction of the locomotive boiler, renders it less liable to bursting, at other points than the tubes, from the gradual increase in the pressure of steam, than other forms of boiler, and it rarely, if ever, bursts from this cause while it is in motion. When the regulator is open, and a free communication made between the boiler and the cylinders, the steam, as fast as it is generated, passes into the cylinder, and acting upon the piston, which may be considered as a valve, loaded with a weight equal to the resistance of the train, moves it as soon as its pressure equals this resistance with a speed proportionate to the rapidity with which the steam is generated. No load that would be likely to be put upon a locomotive engine would cause a resistance upon the piston greater than the iron of the boiler was able to bear, and until this was done, the piston would move before the boiler burst, giving vent to the steam, and the speed of the train would be increased, until an equilibrium was established between the power of the steam generated, and the resistance of the load. But yet it is found that the boilers of locomotive engines do explode, not only while in motion, but also immediately after the pressure of the steam in the boiler has been, to all appearance, reduced by the opening of the regulator, the raising of the safety-valve, the sounding of the steam whistle, or the introduction of cold water.

Facts seem to warrant the opinion that a very small portion of the explosions of locomotive boilers are occasioned by the gradual

increase of the pressure of the steam under an overloaded valve. They seem to be produced by causes which act suddenly and against which no safety-valve, at least as at present arranged, is any safeguard whatever.—The circumstances, under which these explosions take place, are various as we propose to show.

An explosion sometimes occurs immediately on the starting of an engine. This may, we think, be produced by two causes, acting either separately or conjointly.

1st. Water, under the pressure of a single atmosphere boils at 212° Fahrenheit, and at other temperatures varying with the pressure. As water, kept perfectly still, may be cooled below the usual freezing point without being frozen, so it may be heated above the usual boiling point, under the same circumstances, without being turned into steam. While a locomotive is standing with the fire burning slowly under the boiler, the pressure of the steam is constantly but slowly increasing, and the water being kept perfectly still may be heated above the boiling point for the given pressure, as it certainly is up to it. As soon however as the regulator is opened, or the safety-valve raised, a portion of the pressure is removed, and rapid ebullition is produced in water heated above the boiling point for this reduced pressure, and a sudden disengagement of steam is produced in the same way as crystals of ice are formed in water cooled below the freezing point, by agitating it. The steam thus rapidly generated, strikes the boiler with a sudden blow, and breaks it, though the boiler would resist perfectly the same force gradually applied.

That this sudden and destructive generation of steam arises at times from a reduction of the pressure, would seem probable from the appearance of boilers after explosion. They are torn in all directions, and rarely, if ever, present the appearance of a single opening relieving at once the internal pressure, like the prick of a pin in a bladder distended with air. Anything that excites motion in the water may cause this sudden development of steam, as the following facts show.

A stationary engine exploded at Bradford, in England, in 1844. The fire had got down very low, and more fuel was put on. The steam was escaping from the safety-valves. The boiler exploded seven or eight minutes after the fuel was put in. The cause assigned was that the water had been heated when perfectly still above the boiling point by a slow fire, the sudden increase of which putting the water in motion, caused a sudden development of steam.\*

An experiment described in the same magazine illustrates the same principal:

"Take a common Florence flask, about half full of water; boil the water over a lamp; remove the lamp, and when all ebullition has ceased, holding the flask steady, cork it. Take it now by the neck in the hand protected by a cloth, and give it one or two vigorous shakes. The flask will instantly burst with a pretty observable explosion.

2nd. While the locomotive is standing, the fire being slow and the water still, the level of the water may be lowered below the smoke tubes, and they may become heated. As soon as the regulator is opened, ebullition becomes quite rapid, and the level of the water may be raised by it two or three inches, so as to bring it upon the heated tubes or plates. This will be followed by an instantaneous development of steam, which may burst the boiler.

These sudden and violent explosions more frequently take place while the engine is in motion, as has happened in many cases on American roads. Owing to the carelessness of the engine driver, or faulty construction or working of the pumps, and these are apt to get out of order at high rates of speed, the water having been allowed to get too low in the boiler, the exposed portion of it becomes intensely heated, and water being again admitted, an instantaneous generation of steam follows which tears the boiler in pieces.

Besides the danger of a sudden generation of steam on the introduction of cold water, as the strength of iron is greatly diminished by being heated red-hot, (according to Fairbairn it is diminished five-sixths), when a portion of the boiler is thus heated it may burst under the ordinary working pressure.

While the engine is running, as in the case of the Taychonic on the Boston and Providence road, on a down grade, with the regulator closed, an explosion of this kind may occur without the introduction of any more water into the boiler, by the opening of the regulator, the raising of the safety-valve or the blowing of the whistle, either of which by increasing the rapidity of ebullition, may raise the level of the water, so as to bring it upon the heated surface. In the case of the Taychonic, the whistle was heard the instant before the explosion, and it seems probable that the accident was caused rather by a change in the level of the water in the boiler, than by an increase of its quantity.

Alfred Guthrie, in a memorial to Congress on the subject of steam boiler explosions, has given an example of one occurring in a stationary boiler from the introduction of water into it, when it was heated, which shows so clearly the mode in which this class of explosions occurs that I shall quote it in full.

"It was an ordinary sized Mississippi boiler used in a machine shop; the water fed to the forcing pump through a side faucet, to be shut off or on at pleasure, leading to a cistern overhead. The regular engineer came to the shop in the morning and started the works; the boiler had been filled and this faucet closed, so that no water found its way to the pumps. Soon after the engineer was taken suddenly ill, leaving the boiler in charge of a person thought to be competent, but who in fact was entirely ignorant of the business. The fire was continued for a short time, every thing going on well, until the water became low and afforded nothing for generation of steam, when the power began to diminish and the machinery to be driven with enfeebled force. This state of things tended to increase the energy of the firemen, the arch being crowded with fuel without effect until finally the whole work was upon the point of stopping. At this moment the owner came in, and found an excellent fire and no apparent reason why the engine should not do its accustomed duty. He found by the water gauge that there was no water, and hastened to the side faucet, and imprudently turned on the water, and in an instant the whole was blown to atoms, killing the engineer, and severely injuring many others who were in the building, which it levelled to the ground."

Locomotive boilers may explode from the effects of incrustations forming on their bottoms or sides. In the engineer's and architect's Journal for September, 1854, there is an account of the effects of incrustations upon salt pans, which illustrates the principle very well.

CONTINUED.

\* Mechanic's Magazine, May, 1844.



**RESEARCHES UPON THE INFLUENCE OF SULPHUR UPON IRON, AND THAT OF PHOSPHORUS IN PARTIALLY NEUTRALIZING THE ACTION OF THE SULPHUR; BY M. JANOYER.**

**CONCLUDED.**

[Translated from the Ann. des Mines, 6th vol., for 1854, p. 149, for the Amer. Jour. of Science and Arts by W. J. Taylor.]

In this manner we may explain the loss of sulphur, which has been proved to occur without a loss of phosphorus.

These analyses of carbon presenting great difficulties particularly in the workshop of a metallurgist, I adopted the method of M. Regnault for the combustion of the cast iron, as it seemed the only convenient method of separating these small quantities of carbon.

In open crucibles by a forge fire were remelted:

1st. 10 grammes of very fine iron wire (No 8 of commerce) cut into three small pieces, with 0.20 grammes of pyrites.

2nd. 10 grammes of the same wire with 0.20 gr. pyrites, and 0.20 gram. of calcined bones.

The amount of sulphur in the two fused buttons were estimated in order to ascertain whether there had been a loss of sulphur as in the fusion of the cast iron, made under the same circumstances.

For if in these two trials the analyses gave the same amount of sulphur, it would be demonstrated that carbon was the sole agent which caused a loss of sulphur in the case of the fusion of the cast iron, and that the phosphorus by replacement of the carbon had assisted in this loss of sulphur. In melting the iron wire in the presence of pyrites and in an open crucible, it might be supposed that a loss of sulphur would occur by oxydation from the air, but such was not to be feared in this case, as a great quantity of iron covered the pyrites completely, preventing all contact with the air.

The two assays succeeded perfectly: the two buttons were well fused. That made with the phosphate of lime was very hard, breaking readily, from which it is seen that phosphorus tends to make iron very "cold-short." 1.90 grammes of each button of fusion were treated with boiling nitric and a little hydrochloric acid so as to dissolve everything completely, except some little granules of sulphur, which were readily collected.

The following are the results of the two assays:

1. Trial with pyrites and calcined bones.

Sulphur not attacked by acids, ..... 0.0150  
Sulphate of baryta, 0.03: Sulphur, ..... 0.0041  
0.0191

2. Trial made with pyrites alone;

Sulphur not attacked by acids, ..... 0.0001  
Sulphate of baryta, 0.065: Sulphur, ..... 0.0029  
0.0190      0.0191  
0.0190

0.0001

From this it is seen that there is no material difference in the quantity of sulphur, since on calculating the sulphur in the sulphate of baryta to five decimals, there is only a difference of a tenth of a milligram. It may therefore be concluded that phosphorus removes no portion of the sulphur when iron is remelted in the presence of pyrites and phosphorus.

On the contrary, when cast iron is melted with pyrites and phosphate of lime, there is always found a loss of sulphur.

The only difference in the results is in the carbon; and it follows, as before stated, that

the loss of sulphur is to be attributed to its combination with carbon; a combination facilitated by the presence of phosphorus, which tending constantly to form a phosphuret of iron replaces a certain quantity of carbon.

We thence naturally infer that irons are less "hot-short" which are obtained with a mixture of phosphatic ores, because of the influence of phosphorus in neutralizing partially the action of sulphur in the irons.

These explanations give us also an explanation of a known fact in practical metallurgy, the explanation at present given being insufficient although partly true. There is no practical metallurgist who in treating very phosphatic ores has not obtained, contrary to his expectation, with a proper heat and slags, indicating a complete reduction,—some cast iron completely white.

It has always been supposed that phosphorus gave too great fusibility to the mass and accordingly prevented the formation of a gray iron. But to this explanation, which has some truth, there must be added the loss of carbon caused by the tendency of phosphorus to form a phosphuret of iron. For if the fusibility were the only cause, the slags should be slightly charged with iron, which is not the case. In all the synthetical trials and analytical results obtained, we find that phosphorus serves to remove a portion of the sulphur probably by favoring the separation of the carbon of the cast iron which then combines with the sulphur to form a sulphid of carbon.

Moreover, phosphatic irons, according to Karsten (Manuel de metallurgie), preserve better their heat, pass more quickly to a white heat, a heat which spreads uniformly through the whole, whilst sulphurous irons, and as a consequence those "hot-short," cool rapidly and very unequally. The bar of forged iron in this condition presents no homogeneity, and breaks very easily. Hence in certain cases the influence of phosphorus, which is generally considered very injurious, may perhaps be advantageous. The metallurgist should use it with moderation, avoiding too great a quantity in the bed of fusion, as it is known that after cooling completely, phosphatic irons are brittle.

It is therefore necessary before using it to ascertain the required amount by a series of experiments on a large scale. These experiments should be made with much care, for, according to Karsten, it is known that the extreme limit of phosphorus in a good iron is 0.30 per cent; if this quantity is exceeded the irons lose their tenacity when cold and will not resist a shock or blow.

Very phosphatic and "cold-short" irons have ordinarily a grained fracture, with brilliant facets, without any fibres like many strong irons. The practical metallurgist ordinarily selects them for uses where the very soft slightly "hot-short" irons would be disadvantageous, as in the manufacture of nails. There is often also a demand for certain purposes for brittle iron.

It has indeed been remarked, but without explaining the fact, that certain coarse-grained "cold-short" irons forge very easily. We must not conclude from this (which has often been done), that all "cold-short" coarse-grained irons are always good when hot. In fact, a bad iron may be charged with silicium for instance, which will make it "hot short" as well as "cold-short," and which will not work nearly as well as a fibrous iron well prepared and free from silicium. It is then

necessary to ascertain first that the irons are cold-short from the presence of a small quantity of phosphorus, and not from the presence of another ingredient, or some cause inherent in the metallurgical treatment.

In all the experiments on a grand scale, made to favor the passage of the phosphorus into cast iron without compromising its quality by introducing silicium, I have always observed that the result from a charge containing equal quantities of clay and carbonate of lime was the best. In this case the slags have the following composition:

	Silica.....	Oxygen.....
	48.07 pr. ct.	24.87
	15.94	7.44
	35.99	10.11

These slags are well suited to a good result; for without being too silicious they are not injurious to the quality of the iron, in facilitating the reduction of the silica; neither do they contain too great a quantity of base to prevent the decomposition of the phosphates in the bed of fusion and the passage of the phosphorus into the cast iron.

In conclusion I will allude here to the memoir of M. Stengel, (Ann. des Mines, t. x. 3d serie), who pretends to have assayed very sulphurous irons which were not in the least degree "hot-short." He contends that it is to copper that this property of iron must be attributed. Every one knows in fact that a feeble quantity of copper prevents iron from welding and renders it "hot-short" in a high degree. But I will say in opposition to M. Stengel, that this quality cannot ordinarily be attributed to copper, copper being very rarely present, but as a general thing, to the presence of sulphur. Besides, in all the trials on a large scale which I have made with care, if copper had been the cause of the "hot-short" iron which was obtained, there would have been "fers de couleur" at the time of treatment with charcoal as well as when the mineral coal was used, which was by no means the case.

When the irons obtained in la Bourgogne and la Franche-Comte by the use of charcoal and those derived from the same ores treated with mineral coal in the furnace of la Loire, or the Rhone, are compared, vast difference is found, the latter being "hot-short," owing to the pyrites in the coal.

**Recapitulation.**—From the ressearches, experiments and analyses in this memoir, it will be seen:

1st. That traces of sulphur are sufficient to give a bad quality to iron and render it "hot-short."

2nd. That the passage of sulphur into the iron takes place generally in the fusion of the ore in contact with mineral coal in a high furnace, and consequently it is in this operation that it must be counteracted.

3d. That phosphorus in the "bed of fusion" removes a portion of the sulphur in the cast irons by replacing a portion of the carbon, and facilitating accordingly the formation of a sulphid of carbon.

4th. That the quantity of phosphorus is not diminished when cast iron and irons are melted in the presence of pyrites.

5th. That phosphorus in iron facilitates their being worked hot, rendering them harder and more difficult to cut.

6th. That is necessary to study well the elements in the bed of fusion, so as not to introduce into the irons too great a quantity of phosphorus so as to render them too brittle when cold by its excess.



## MONETARY AND COMMERCIAL.

The past week has been marked with the same general features as the previous ones—general dullness in business, and inactivity in the money markets. The regular houses are doing very little, and that only for their customers, and on undoubted names. While outside capital is more seeking long loans at high rates, than short paper. Those who have various sums, say from one to ten thousand dollars, seem to understand this, and are taking advantage of the present pressure to secure advantageous loans at high rates.

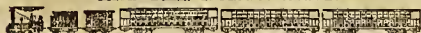
Currency is not in excess. The bank contraction still lasts, and if it were not for the diminished wants of trade, there would be serious inconveniences for the want of current funds. The notes of neighboring states begin to pass more current. Indiana sound banks go at one per cent. discount, while Illinois' funds pass at three.

Exchange on the East is quoted at  $1\frac{1}{2}$  to 2 per cent., and in some instances  $1\frac{1}{2}$  to 2 per cent. This looks like returning to legitimate business. The produce market is not so brisk.

From the East we notice as favorable reports as could have been expected under any circumstances. The bank statement in New York shows a material increase of specie and deposits.

The news from Europe of the suspension of the Bank of England and the temporary issue of small notes, was the most startling event of the week. This was accompanied by a list of failures in England and Scotland as unexpected as it was extensive. These will more or less affect American Houses, drawing on them as even should the suspensions prove temporary, they look up available means. The probability is, that the panic has reached its highest, and that matters will improve. We have no Cincinnati quotations of stocks this week.

## INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



### INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD

#### VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

#### THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

#### VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M. H. C. LOID, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

**T. F. RANDOLPH & BRO.**  
Mathematical Instrument Makers,  
N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

## The Great Arnold Secret Discovered at Last

### BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

#### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line & Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

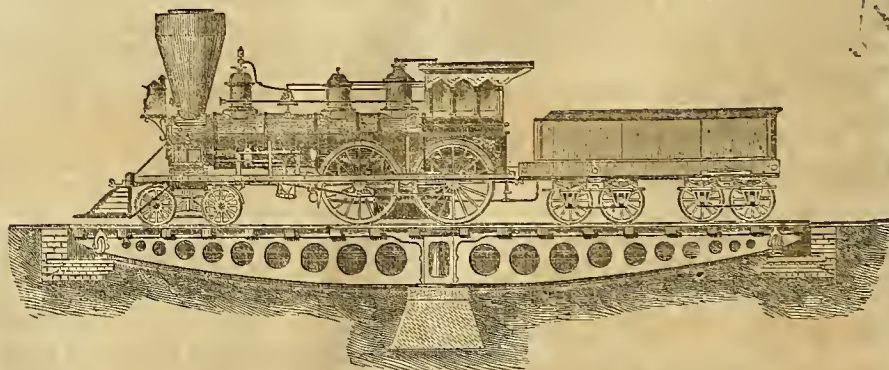
N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers & Co.

—LATE—

### BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING AND SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

#### ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of Engineers and Machinists' tools; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills, Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, Jr.



## WAREHOUSE

No. 5 FRONT STREET,  
Opposite Public Landing,  
Cincinnati, O.

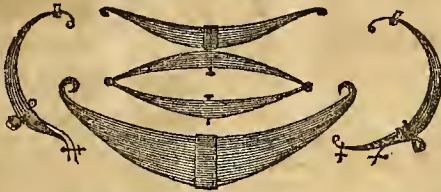
## PORTER, ROBE &amp; SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.  
Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

## MCDANEL &amp; HORNER,

LOCO- AND CAR  
MOTIVE SPRING



## MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

McDANEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

## References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R. R. Co.

May 19.

ALBERT M. LEA,  
CIVIL ENGINEER,  
KNOXVILLE, TENN.

## New Works on Civil Engineering.

THE Field Practice of Laying out Circular Curve for Railroads. By John C. Trautwine, Civil Engineer. 4th Thousand, in pocket-book form with tucks.

—ALSO—

A New Method of Calculating the Cubic Contents of Excavations and Embankments, by the aid of Tables and 10 Engraved Plates of Diagrams. By John C. Trautwine, C. E.; 2d edition.

Price, one dollar each. Postage on the Curves, five cents; on the Excavations and Embankments, eight cents. For sale by WILLIAM HAMILTON.

Hall of the Franklin Institute, Philadelphia, Pa.

Sept. 21-3\*

## HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by  
CHARLES W. COPELAND, Gen. Agent.

fy30

No. 66 Broadway, N. Y.

## RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE, LIVINGSTON & CO.,  
9 South William street, N. Y.

feb19 1m

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,  
Wilmington - - - - - Delaware.  
MANUFACTURERS OF

CHILLED WHEELS  
AND

TIRES,  
For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,  
EITHER SINGLE OR DOUBLE PLATE.  
WITH OR WITHOUT AXLES.

WHEELS FITTED  
To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Harlan & Hollingsworth,  
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad  
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

oc2

## Union Works, Baltimore.

POOLE & HUNT,  
Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

## Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ap2

ANDERSON, GATES & WRIGHT,  
STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,  
No. 112 MAIN STREET,  
East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,  
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,  
(SUCCESSORS TO JACOB ERNST.)  
112, Main Street, Cincinnati

J. T. CRAPSEY,  
ATTORNEY AT LAW,  
OFFICE:

N. W. Cor. Walnut & Sixth streets,  
my21 CINCINNATI

SCHENECTADY  
Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.  
WALTER McQUEEN Sup't. Au10 1y



**GENERAL  
RAILWAY SUPPLY AGENCY.  
SNOOK & HILL'S PATENT  
LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address **W. G. HYNDMAN,** ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**  
**Mechanical Engineer,**  
AND  
**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.  
Entrance 5 Tryon Row.

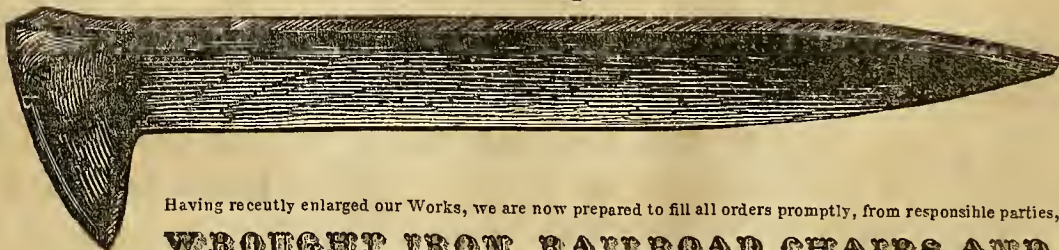
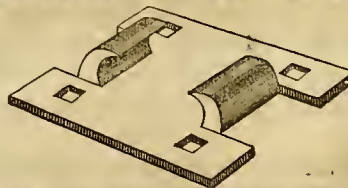
Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an Improved Method. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the head where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the tip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of **HOOK-HEAD RAILROAD SPIKES**, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality iron, selected with especial reference to please our patrons.

Before making contracts for **CHAIRS AND SPIKES**, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, a can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak themselves. Samples sent to any parties wishing to examine them.

au 20.17

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route.

#### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

710 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Settling Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

1897

LEE & LEAVITT.

1857. November 9. 1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 8:30 P. M. Evening Express, through to Bellair and Pittsburgh without change of cars.

#### FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 4:40 P. M., for Springfield and Columbus.

This train also makes connections for Wilmington, Lancaster and Zanesville. This train stops at all points between Cincinnati, Springfield and Columbus.

FOURTH TRAIN.—Cleveland, Pittsburgh and Wheeling Night Express, leaves Cincinnati at 8:30 o'clock P. M., for all the Eastern cities.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

#### FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House; or at the Old Office, south-east corner Broadway and Front, opposite Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

FOR TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-huses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-huses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Ctn. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,

Jan8 1y

119 Walnut st., Odd Fellows' Buildn

1857. Summer Arrangement. 1857.

## Cincinnati, Hamilton & Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

### THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, ST. LOUIS, LAFAYETTE, LOGANSPOUT, CHICAGO, BOSTON, NIAGARA FALLS, NEW YORK,

And to all Eastern and Northwestern Cities.

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

### "STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

### FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

### RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

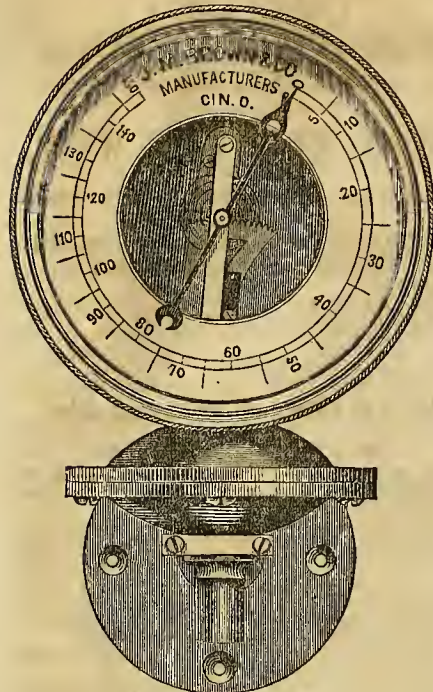
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to

DRILL THE TUBE-PLATES

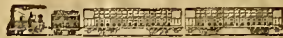
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wreches and Wrought on Blacksmiths' Tycres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER &amp; SON,

82 PLATT STREET, New York.

# Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS &amp; SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

## MORRIS, TASKER & CO.,

Manufacturers of

## LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite lengths as required.

WROUGHT IRON WELDED TUBES, From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,

PHILADELPHIA.

[205]

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 300 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. H. GOODMAN &amp; CO.,

Feb 7, '66-2m.]

no. 7 Wall st., N.

## RAILROAD CAR

AND

## COACH TRIMMINGS.

## DOREMUS & NIXON

No 21 Park Place, and 18 Murray st.,

NEW YORK,

## IMPORTERS

OF

Plain and Figured Mohair Plush.

Printed &amp; Unent do., Entirely New Designs;

MOQUETTES &amp; VELVET CARPETS;

Enameled Cloth, for seats &amp; backs of Cars

ROPE MATTING, Every Width.

Oil Cloths for Head Linings, Enameled with Gold and Silver.

DUCK CANVASS FOR CAR ROOFS;

Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;

## PATENT FELT.

FOR CUSHION &amp; MATTRESS FILLING

N. B. We have the Plush in bond for exportation.

sep18

DOREMUS &amp; NIXON

## W. G. ATKINSON,

Civil Engineer, Surveyor &amp; Draftsman.

CUMBERLAND, MD.

RAILROAD routes located, planned, and estimated

Maps and Reports furnished; Researches made for

Coal, Iron, Copper, Lead, or other Minerals,

Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and Lithographs supplied by skilful artists. Mines explored, new Works laid off, and Geological plans prepared.

ma111y

## The Kentucky Military Institute.

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

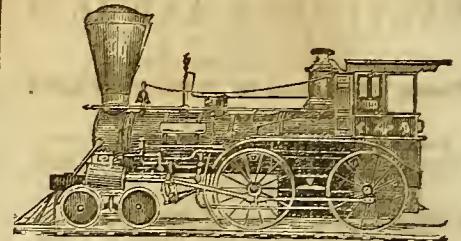
Address the Superintendent, at "Military Institute, Franklin county, Ky." or the undersigned.

P. DUDLEY,

Aug14-1y

President of the Board

# CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE &amp; RICHARDSON.

## Railroad Car Findings

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels &amp; Axles, Jaws Boxes, and Casting Fitted

Wrought Nuts, Bolts, &amp; Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

Cotton Duck for Cr Covering, Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.

foc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

## SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mills, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the lowest price.

SILVER MEAL. (The highest prize awarded for the best pump) Ohio Mechanics' Institute. June 18, 1855 F1



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....DECEMBER 2, 1857.

CONTENTS.—NO. 41.

EDITORIAL.	
Railroad from Vera Cruz to Mexico.....	625
The Cincinnati Gazette and the Southern Pacific Railroad.....	626
RAILROADS.	
Blue Ridge Railroad, South Carolina.....	627
MISCELLANEOUS	
Lord Brougham on Accidents.....	630
Improvements in the Manufacture of Iron.....	631
Explosion of Railroad Boilers.....	632
MONEY AND STOCKS.	
Sales at the New York Stock Board.....	633
Monetary and Commercial.....	633

## SOUTHERN PACIFIC R. R.

We learn from the Marshall Republican, of Oct. 31, that the President of this Company has executed a deed of trust to Benj. Long, Wm. Bradfield, and J. K. Yerger, wherein all the lands of the Company within the county of Harrison, together with the whole road bed of the road between Marshall and the Eastern terminus at Swanson's Landing, the iron laid down or on hands along the line, the two locomotives, the chairs, spikes, and cars, and all the franchises and privileges of the company within the State of Texas are "bargained, sold, transferred, conveyed and released" to the said party of the second part, to secure the payment of a list of debts thereafter named, reserving the right to contract a preferred debt to the amount of \$30,000, for the purpose of carrying forward the work necessary to save their charter from forfeiture.

This step is understood to have been taken by the Directors in consequence of the return of protested drafts of the firm of Stillman, Allen & Co., of New York. The Company have till January 15th, 1858, to meet the obligations incurred by the failure of this firm and the return of the drafts. If these are met, the deed of trust will be null, and the Company will still hold its road and privileges. We regret that the Directors have felt it necessary to resort to the measure adopted. There can be no doubt; however, that the installments due from the stockholders on the first of January, if promptly paid, would meet the obligation and release the Company from embarrassment. It is, however, due from the Directors to the stockholders that they should make an immediate exhibit of the actual condition and resources of the Company—the amount of its indebtedness, the amount of stock issued, how much has been paid on it, and how much is yet due. Such an exhibit is due to the stockholders as their right, and to the Directors as exonerating them from the charges that might be made against them.

VOL. 5.—No. 41.

## RAILROAD FROM VERA CRUZ TO MEXICO

Among the novelties of the day, is the intended construction of a Railroad from Vera Cruz to Mexico—a plan, which if successful, may be regarded as the first step taken, by Mexico, in the great march of Internal Improvement. It is quite uncertain whether this scheme is practicable, without an immense expenditure of money; but, the Mexican Government has determined to test its practicability. For this purpose, COL. TALCOTT, the able Engineer of the *Ohio & M. R. R. Company* is about to reconnoitre the route, and make surveys in the employment of a Mexican Company of Capitalists. He will be accompanied by MR. PAGE, the late Engineer of the Cincinnati Gas Works. These gentlemen have gone to Washington to confer with the agents of the Mexican Company in regard to future arrangement, and contemplate, we believe, proceeding to Mexico in January.

The Mexican Government has, as we understand it, conferred a Charter and privileges on a Company, and are in addition to aid that Company with a portion of Church property, recently confiscated to the public use. There is, therefore—if the route be practicable—a strong probability that the work will be completed. Commercially, there is the strongest motive for it. The freights from Vera Cruz to Mexico (the most traveled road to Mexico,) are enormously high. From the nature of the country, the people, and the Government, this must necessarily be the case. The total want of system, of skill, of industrious habits, must necessarily render all commercial operations very high. If, at any moderate cost, a Railroad can be made from Vera Cruz to Mexico, it must be very profitable, even when it has reduced greatly all the ordinary rates of transportation. At this point arises the main and most interesting question: Is this road practicable, in an Engineering point of view, at any tolerable cost? If it were so, we should suspect our Yankees of having found it out before this. For it is certainly a tempting field for what we Americans call "Enterprise." But here is the question, let us examine it:—

Mexico lies in great plateaus, of which the central is about 7,000 feet above the level of the sea. Humboldt considers these plateaus as a spreading out prolongation of the great mountains of South America. From the city of Mexico to the ocean, there are three of these great plateaus, each of which constitutes a distinct climatic region, answering to as many different portions of the earth. Now, the descent from one of these plateaus to another is abrupt, with no such thing as ravines or valleys, through which a gradual ascent may be obtained. This is so much the fact, that the National Road of Mexico, so called, had to wind very far out of the way

to obtain even a tolerable stage route. The physical description of the plateaus, and topography from Mexico to the Ocean is thus given by the Geographer Malte Brun, who derives his information from Humboldt:—"Of the four plateaus situated around the Capitol of Mexico, the first which comprehends the valley of Toluca is 8,530 feet in height; the second, of the valley or Tenochtitlan, is 7,460 feet; the third, or the valley of Actopan, 6,553 feet, and the fourth, of the valley of Istla, is elevated 3,343 feet. These four basins differ from each other as much in climate as in elevation above the level of the ocean. Each of them is adapted to a different species of cultivation. The last and least elevated is suitable to the growth of sugar-cane; the third, for that of cotton; the second, for producing the wheat of Europe; and on the first, there are plantations of the Agaves, which may be considered as the vineyard of the Aztec Indians.

"If this configuration of the earth singularly favor, in the interior of New Spain, the conveyance of merchandize, navigation, and even the construction of canals, nature opposes great difficulties to the communication between the interior of the kingdom and the coast, which, rising from the sea in the form of a rampart, everywhere presents an enormous difference of level, and of temperature. The southern declivity, more especially, is rough and of difficult access. In traveling from the capitol to Vera Cruz, it is necessary to proceed sixty nautical leagues before a valley can be met with of which the bottom is lower than 3,281 feet above the level of the sea. Of the 84 leagues which are reckoned, as far as this post, fifty-six are occupied by the great plateau of Anahuac; the remainder of the road is nothing but one continued and painful ascent. It is the difficulty of this descent that renders the conveyance of the flour of Mexico to Vera Cruz so expensive, and prevents it from rivalling in Europe the flour of Philadelphia. In the road of Acapulco, along the great ocean, the traveler reaches the temperate regions in less than a distance of seventeen leagues; after which he has incessantly to ascend and descend as far as the sea."

This account of these plateau make it certain that it will be very difficult, if not altogether impracticable to make a railroad from Mexico to the Ocean. The city of Puebla, about 90 miles from Mexico—is on the upper plateau,—at least it is 7,000 feet above the sea. From thence to Vera Cruz is 200 miles. In this distance 7,000 feet must be overcome. If the elevation could be distributed on an even plane, it would amount to a continual ascent of 35 feet to a mile.—But this is not so. The change from the plane of 6,500 feet to that of 3,300 is exceedingly abrupt.—We are informed, that this



ascent must be made in 23 miles. Thence the ascent at the grade of 140 feet per mile. We know of no road which has ascended 23 miles at this rate;—yet this grade is not an impracticable one; if it be made,—so as to give rests occasionally to relieve the engines, and insure safety. It is well known that a locomotive, with several car loads of freight will ascend a grade of 200 feet per mile.—But this has never been tried on long planes;—and we apprehend would be commercially impracticable on account of the great amount of power required, and the great wear and tear which must occur.

It may be, that a careful examination will shew some ravines or, vallies, which will afford an easier route. This is the object of *Talcott* and his party. It will be to settle the first and vital question, whether such a grade can be obtained as will not only be feasible in a scientific point of view, but, commercially.

The road is doubtless a possible thing, and we trust, it may be found among the practicable things, which will not only prove an honor to the engineers, but of great commercial value to the whole country.

The effect of such a road on Mexico, and our commerce can hardly be overrated. A railroad from Vera Cruz through Mexico to a near port on the Pacific would be about 500 miles. The reader needs only a good map to see, that this route will be a saving of time, and distance over any route yet proposed, except that of the Southern Pacific. It is nearer than the Tehuantepec, and much nearer than the Nicaragua or Panama routes. In fact, it is not to be doubted that should the Vera Cruz and Mexico Road be found practicable, it will be succeeded by its continuation to the Pacific; and a railroad route be made to the Pacific, in all respects, greatly superior to any, except the U. S. Pacific R. R.

#### THE CINCINNATI GAZETTE AND THE SOUTHERN PACIFIC RAILROAD.

We find the following remarks in the monetary article of the *Cincinnati Gazette*:

Just as we expected, the Southern Pacific (Texas) Railroad Company has, or is about to explode. The men who have been connected with the concern, the measures that were adopted to impose the speculation upon the public, satisfied us, a long time ago, that it would prove to be a swindling concern. It was conceived in iniquity, and from the first, the most glaring rascality has been connected with its movements.

Those of our readers who were so confiding as to subscribe for or purchase the stock, will read with interest an article on the subject, printed in another place. Over two million dollars of stock is supposed to have been fraudulently issued. It is to be hoped the Texas Legislature will annul the charter, and thus throw overboard as rotten a set of speculators and sharpers as ever got together in a corporate capacity.

The money editor of the *Cincinnati Gazette* tells his readers in the above that, just as

he expected, the Southern Pacific Railroad Co. has, or is about to explode. He is undoubtedly one of those wise ones who always expect just what actually happens, but who, unfortunately, never give their friends the benefit of their expectations in season to be of practical utility to them. It would have been more creditable to the money writer of the *Gazette*, not to have expected such an event, than to have maintained his silence about it till after it occurred.

He tells his readers that the "men who were connected with the concern, the measures that were adopted to impose the speculation upon the public, satisfied him, long ago, that it would prove a swindling concern." And so it is a matter of the most intense satisfaction to the seer of the money columns of the *Gazette*, that he had the sagacity, long ago, to foresee in silence the ruin that would ensue to those of his readers who were so confiding as to subscribe for stock in a concern which had such men connected with it. It would perhaps be a matter of satisfaction to some of the friends of this road in this city, if the writer in the *Gazette* would inform them who were those men whose connection with the enterprise stamped it as a "swindling concern." Wholesale allegations like that quoted above, are sometimes considered by disinterested men as wholly unjustifiable. But let us see what were the measures adopted to impose the speculation upon the public.

*First.* The State of Texas gave a charter to the Texas Western R. R. Co., for the construction of a railroad from its eastern boundary, near Marshall, to El Paso, and granted the Company aid in the shape of extensive land grants, which by subsequent enactments amounted in the aggregate to 10,240 acres per mile, and a loan of \$6,000 per mile for every mile built.

*Second.* The Company made a survey of the whole line of road from Marshall to El Paso, and from El Paso to San Diego on the Pacific coast, with a carefully prepared estimate of the cost of construction, equipment and operation.

*Thirdly.* The Company commenced the construction of its road, and so far, has complied with the conditions imposed upon it by the Legislature of Texas.

In all these operations we see nothing different from the proceedings of any other railroad company, and certainly these were not measures taken to impose upon the credulity of the public. The irregularity of its proceedings—and that can hardly be called an irregularity which has been done by nearly every other land-grant road—was the sale of its stock subject to an assessment of only five per cent. To this they were induced from a consideration that the proceeds of five per cent. sales on one-quarter of the whole authorized stock, would construct the first ten miles of road, and that the lands of the Com-

pany would be an ample basis for the construction of the balance. This policy they openly avowed, and it was for those who were so credulous as to invest in this stock, to satisfy themselves whether they were willing to trust the openly avowed policy of the directory.

Facts are, however, stubborn things, and the present condition of the Company, with twenty-five miles nearly completed, with locomotives and cars on the completed portion, and with a comparatively small debt, shows it to be fact, that, but for the protest of some of the drafts taken in payment of stock, the Company would have accomplished all it proposed to accomplish by the sale of stock. Whether the misfortunes of some of its stockholders, and those having purchased only within the last eighteen months, are a sufficient warrant for the wholesale charge of swindling, the money writer of the *Gazette* may pretend to know. Some as honest men as he, do not think so.

That this company has made mistakes, we do not pretend to deny. In our opinion, it was a mistake one year ago to put the management of the company in the hands of the parties in New York who were elected to the directory. It was also a mistake for the company to accept time paper in payment for its stock. The deed of trust now executed, and which the company has a right to annul on the 15th day of January, may be a mistake, —we do not know enough of the circumstances to warrant us in saying that it is or is not; but it may also have been the means of preventing the sale of the road, under execution for a comparatively small debt.

For ourselves, we are not of the number of those who like vultures hang over the path of every incorporated company ready to pounce upon every circumstance, right or wrong, which can be construed to the detriment of the company. We hope yet to see the incorporated companies of our country prosper, and more, to see a Pacific R. R. built, and shall be glad to see even this company, now under difficulty, preserve its franchise and build its road. It has beyond question or doubt the best route for the Atlantic and Pacific highway. Its charter is liberal and its land grants alone are ample means for the construction of the road, provided they are made available by competent management.

NATIONAL ASSOCIATION OF ENGINEERS.—The following are the officers of the Association for the ensuing year:—T. Baskeo, President, Baltimore, Md.; J. L. Wadleigh, Vice President, Springfield, Mass.; J. W. Clark, Secretary, Bridgeport, Conn.; Moses Douty, Corresponding Secretary, Altona, Pa.; Henry H. Brown, Treasurer, New Haven, Conn.; Finance Committee: J. A. Morse, New York; R. H. Smith, Allegheny, Penn.; J. R. Bruth, Newark, N. J.



## Railroads.

### BLUE RIDGE, R. R. S. CAROLINA.

The annual meeting of the stockholders of this road was held in Charleston, on Nov. 17, and the following gentlemen elected directors for the ensuing year :

Hon. Edward Frost, Hon. Charles Macbeth, Mayor of Charleston, Henry Gourdin, C. M. Furman, G. A. Trenholm, Robert Adger, William C. Dukes, Chas. T. Lowndes, Wm. C. Heyward.

Hon. Edward Frost was subsequently elected President, and Wm. H. Peronneau, Secretary and Treasurer.

The Report of the President contains an elaborate expose of the condition, prospects, and resources of the company. We make such extracts as will show the condition of the work and the finances of the road :

For the purpose of exhibiting the work which has been done, and the present condition of the Road, it will be convenient to divide it into sections.

#### FROM ANDERSON TO PENDLETON.

Beginning at the junction of the Greenville and Columbia Railroad, near Anderson, the Blue Ridge Road passes by a deep cut through the town, and proceeds across a hilly country, thirteen miles to Pendleton, crossing the valley of Twenty-Six Mile Creek over a bridge three hundred feet long and one hundred and ten feet high, and the valley of Twenty-Three Mile Creek over a bridge one hundred and fifty feet long, and sixty-one feet high.

The grading is finished, and a part of the Anderson Depot ground, sufficient for the present, filled and leveled. The road is completed for five miles; the cross-ties to Pendleton contracted for and delivered on the line a great part of the way; and the rails, chairs, and spikes, for the section, are imported. Nine hundred tons are on the line of the road, and six hundred are at the South Carolina Railroad Depot, under bond for the duties, because specie could not be procured to pay them, except at a large premium. One first class locomotive, ten gravel, and ten platform cars have been purchased and are employed on the road, conveying material, widening the cut at Anderson, and filling up the depot grounds. The masonry for the bridge over Twenty-Three Mile Creek is finished. The timber for the bridge is procured, and the workmen are framing it. The trestle over Twenty-Six Mile Creek will be finished by the first of December; and early in the next year the trains will be running from Anderson to Pendleton.

The building of the masonry at Twenty-Six Mile Creek was delayed, because a deep and heavy cut, this side of it, was not finished until September. No suitable rock is found near the creek. The contractor was engaged

for some time quarrying rock at Honea-path, on the G. & C. R. R., 17 miles below Anderson. His hands are now employed at the quarry of Col. W. Alston Hayne, near Pendleton. As soon as the road is finished to that town, by a temporary track of  $1\frac{1}{2}$  miles from the road to the quarry, the rock will be carried directly from the quarry to the site of the bridge, and that from Honea-path will be carried over the G. & C. R. R. and our road. When the masonry is done, a bridge will supply the place of the trestle.

#### FROM PENDLETON TO CANE CREEK.

Proceeding from Pendleton, the road passes through a country similar to that from Anderson; crosses Eighteen Mile Creek, over a bridge two hundred and fifty feet long, and fifty one feet high, and Seneca river, over a bridge six hundred feet long, and sixty feet high. From this point it is continued, with lighter grading, to Cane Creek, a distance of about twenty-one miles from Pendleton, and one mile beyond the town of Walhalla.

The grading on this section is nearly finished, except at intervals, not exceeding in all three or four miles, where the grading is light, and can be finished before the embankment and bridge across Seneca river. The masonry at Eighteen Mile Creek has been delayed until the road is finished to Pendleton, that rock may be carried from Hayne's quarry. The bridge over Seneca river will require three piers thirty-five feet high, to span the river and a part of the bottom, sufficient to give vent to the water in high freshets. Two piers are finished, or nearly so. The contractor is at work on the foundation of the eastern abutment, with a large quantity of rock on the ground, ready to be put in place. A long and high embankment over the bottom is necessary to connect the bridge with the eastern bank of the river. This has been made to a height above freshets. The citizens of Walhalla, in May, purchased and generously conveyed to the Company twenty acres of land near the town, for a Depot.

#### FROM CANE CREEK TO CHAUGA CREEK.

Crossing Cane Creek, the Road commences the ascent of the Blue Ridge. To Frick's Meeting House, a distance of two and a half miles, the rise is gradual. A short distance beyond that point the Road reaches the base of the Turnip Top, the most eastern range of Blue Ridge, and for four or five miles gradually ascends along its eastern slope; crossing by a bold curve around one of the knobs to its western slope, it continues up the western slope until it encounters the "Saddle" mountain, which projects from the Turnip Top across the line. Passing through this obstruction by a tunnel four hundred and seventy-five feet long, the Road crosses over to the eastern slope of the Stump House mountain, along which it ascends, passing through a spur of the mountain by a tunnel

called the "Middle" four hundred and twenty-five feet long, until it reaches the portal of the Stump House tunnel, two hundred and thirty-six feet below the highest point of the mountain, and as high as the grade, restricted not to exceed sixty feet to the mile, can ascend. The western slope of the Stump House mountain is reached by a tunnel 5,800 feet long, which emerges on the valley of the Chauga, about ten miles distant from Cane Creek. The ascent of these mountains is effected by heavy cuts along the side, and through lateral ridges of the mountains, and by high embankments across the deep gorges which separate them.

A large portion of the mountain grading has been done.

#### THE SADDLE TUNNEL.

Before noticing the works on the tunnels, it is necessary to premise that the perforation of a mountain by a tunnel, generally, is not begun until the grading of a slope, by an open cut, exceeds the cost of tunnelling. The open cut is called the approach of the tunnel. The Eastern approach of the Saddle Tunnel was finished, when a land slide into the cut delayed work in the tunnel until the earth can be taken away. The Western approach contains a large portion of rock, and is well advanced. It is not yet determined how much further the open cut shall be continued.

#### THE MIDDLE TUNNEL.

Both the Eastern and Western approaches are nearly completed. The contractor has not been urged forward on these tunnels, because they can be finished certainly before the Stump House tunnel, and there is no advantage in finishing them sooner.

#### THE STUMP HOUSE TUNNEL.

Four shafts are provided to expedite the work on the Stump House tunnel, and for its ventilation when completed. Its completion depends very much on the time when they shall be sunk to the grade of the road; for each shaft, at grade, presents two faces in the tunnel which can be worked. When the four shafts are finished, the excavation will be carried on from eight points in the tunnel, in addition to the work in the eastern and western entrances. The contract was let to Mr. George Collyer, in May, 1856. The necessary preparations for the work, and the procuring of workmen, required some time, so that the first return of work was made the first of October, 1856. Shaft No. 1, 161 feet deep, was sunk to grade the first of February last, and shaft No. 4, 188 feet deep, was finished in September. To carry the other two shafts to grade, fifty-six feet remain to be excavated in shaft No. 2, which is 228 feet deep; and 136 feet remain to be sunk in shaft No. 3, which is 213 feet deep. The work on this last was retarded in consequence



of the detention at Philadelphia, by the ice last winter, of the steam engine intended to work it, so that the engine was not put up until the spring of this year. Three steam engines and the horse "Gin," with all the necessary machinery and fixtures for working the shafts and tunnel, are now in use, besides two small steam engines to drive the wind fans for ventilating the shafts and tunnel. More than two hundred workmen are assembled at Tunnel Hill, who work, by relays, night and day. 479 linear feet are excavated from the eastern portal, to the full section of the tunnel, and 212 feet of the heading from the western portal. The heading worked from Shaft No. 1, is excavated 275 feet, and in the heading worked from Shaft No. 4, 30 feet, making in all 996 feet. About one hundred feet of excavation will connect the work from the eastern entrance with the work in Shaft No. 1, and when that is effected, 825 continuous feet of tunnel will be opened from the eastern portal. If a full force can be obtained and employed, the Stump House Tunnel may be finished in three years. But it might be safe not to expect its completion in less than four years.

Mr. Collyer having become dissatisfied, and desirous to relinquish the contract, has been accordingly released. He complained that he was losing money, and under such circumstances it was vain to expect that he would prosecute the work vigorously. The construction will be continued by Messrs. Humbird and Hunter, with an increase of the prices paid to Collyer. For the character and qualifications of these gentlemen, who are well known to the Chief Engineer, reference is made to his Report. They will begin to work with the advantage of every necessary preparation, of engines, machinery, and workmen, and it may be expected that their progress will be satisfactory.

#### CHAUGA TO CHATUGA RIVER.

This section, about 7 miles in length, ends on the southern bank of the Chatuga river, which is the boundary between South Carolina and Georgia. The Road, crossing the Chatuga by a short bridge, reaches the Village Fork by a deep cut through the dividing ridge, and ascending along the slopes of that atream, crosses through the dividing ridge to Whetstone Creek, and ascends up the valley of that stream (crossing it twice by short bridges) until it reaches the southern bank of Chatuga river. Through this section the country is very broken, but presents no engineering difficulties.

Less work has been done on this section than upon either of the others. A few contracts were let by Bangs & Co., and those contractors have been permitted to work at their convenience. As soon as the progress of the tunnel shall require it, this section will be put under contract.

	Total Grading at begin- ning.	Amount Grading done.	Amount Grading rem'ing to be done
	Cubic Yards.	Cubic Yards.	Cubic Yards.
From Anderson to Pendleton.....	845,213	805,113	40,100
From Pendleton to Cane Creek.....	995,473	721,854	273,619
From Cane Creek to Chatuga Creek.....	1,369,219	942,721	426,498
From Chatuga Creek to Chatuga River.....	519,810	186,965	332,845

In South Carolina..... 3,729,715 2,656,653 1,073,062

#### CHATUGA TO THE LOCUST STAKE.

Crossing the Chatuga by a bridge 450 feet long, and 110 feet high, the Road is continued through Rabun County, Ga., to the Locust Stake, in the boundary line between Georgia and North Carolina. From Chatuga the Road pursues the valley of Dick's Creek to the dividing ridge, through which it passes, by a tunnel 2,300 feet long, into the valley of the Warwoman; ascending the valley of the Warwoman until it reaches the dividing ridge, it passes through the ridge into the valley of the Sticco by a tunnel 1,700 feet long; it then follows the Sticco valley to the Rabun Gap, where the waters flowing into the Tennessee river, divide from the waters flowing into the Savannah. Here the mountain section of the road terminates, and the Blue Ridge is passed. The remainder of the line in Georgia proceeds with very light grading down the valley of the Tennessee until it reaches the Locust Stake.

Besides the crossing of the Chatuga, two bridges of 60 and 100 feet each are required over the Warwoman. One abutment for the latter is finished to the height of the bridge seat, and the other abutment is raised above high water. The Chatuga is crossed at a site most favorable for a bridge. The rocky banks, through which the river has worn its channel, present two bold prominences on the verge of the stream. The abutments will be set back in them, so as to require only a small quantity of masonry, and the bed of the river affords a safe, rocky foundation for the two piers. A little more than one-third of the grading on this section has been finished.

#### DICK'S CREEK TUNNEL.

The approaches of the Dick's Creek Tunnel, which are long and deep rock cuts, are not yet completed. The work on this tunnel has been delayed by the first contractor having, after the expiration of the time stipulated to begin operations, declined the work. The second contractor abandoned the work. It is now progressing satisfactorily under the present contractor. The tunnel has to be worked chiefly from the two ends, which will cause its construction to be slow. It will probably take as long a time as the Stump House Tunnel.

#### WARWOMAN TUNNEL.

The western approach, though a long and deep earth cut, is not finished. Three hundred feet were excavated on the 1st of Sep-

tember, in the eastern end, and the contractors are vigorously at work.

The total grading of the road, in Georgia, at the beginning..... 1,378,000 cubic feet.  
Done..... 493,000 " "

Remaining to be done..... 975,000 " "

#### FROM THE LOCUST STAKE TO KNOXVILLE.

Through the State of North Carolina the road descends along the valley of the Tennessee river, and, entering the State of Tennessee, continues along the valley as far as the confluence of the river with Citico Creek, about thirty-two miles from Knoxville, at which point the Road leaves the Tennessee river, deflecting westwardly to that city.

No work has yet been done in North Carolina.

One mile through the suburbs of Knoxville, extending from the junction with the East Tennessee and Georgia Railroad to the Holston river, is finished. Sixteen miles are under contract from the Holston, opposite Knoxville, to Maryville, the County town of Blount County. The Holston at Knoxville is crossed by a bridge 1,150 feet long, and 66 feet high, and the Road proceeds to Maryville, over an undulating and fertile country, crossing Little river by a bridge 250 feet long and 35 feet high.

One-third of the grading on the line from the East Tennessee and Georgia Railroad to Maryville is done. Of the seven piers in the Holston river, one is finished, the foundations of another are above water, and the contractor is now at work on a third.

Very good rock is found on the bank of the river, and when the foundations are laid, no difficulty attends the completion of the bridge. The work is undertaken by an experienced and respectable contractor.

Total grading of the sixteen miles  
let, in Tennessee..... 310,000 cubic yards.  
Done..... 148,000 " "

Remaining to be done..... 162,000 " "

The right of way through Knoxville and Knox County, with the exception of two cases under appeal, has been purchased; many claims for compensation for the land taken by the Company in Blount County have been released, and a few adjusted with the owners. With very few exceptions the rights of way through South Carolina, Georgia and North Carolina, have been released or purchased.

The total amount of expenditures, on all accounts, since the beginning of the work under Bangs & Co., has been..... \$1,578,713 97

A part of these expenditures is payable in mortgage bonds of the Company to the amount of..... \$181,036 49  
In Knox County bonds..... 17,544 39  
In Stock..... 176,922 59—375,703 47

Cash reserved on contracts not finished.. \$1,203,110 50  
25,725 04

Total of cash expenditures..... \$1,177,385 46

More than the amount of Knox County bonds, stated above, have been paid out on account of the work in Tennessee, but the payments do not appear on our books, and a statement has not been received from the President of the Tennessee Company.



Twenty-nine thousand dollars of the mortgage bonds issued to Bangs & Co., are held by the Company as security for a loan of \$28 500, made to them under their contract.

The amount expended, compared with the amount of work done, and the large incidental expenses defrayed for surveys, right of way, depot grounds, and other items of that class, affords encouragement to expect that the cost of the Road will not exceed the estimates which have been made.

The Blue Ridge Road at Knoxville will connect with the Northern terminus of the Georgia and East Tennessee Railroad, and with the Southern terminus of the Tennessee and Virginia Railroad, and crossing the direction of those roads, will form a Western connection with the Knoxville and Kentucky Railroad, designed to connect the latter city with Danville, in Kentucky, from which a railroad is completed to Covington, opposite to Cincinnati, on the Ohio. From Knoxville it will be 103 miles nearer to Charleston than to Savannah, and 46 miles nearer than to Richmond, so that the Virginia and Georgia roads, which now transport the trade of East Tennessee from Charleston, must become tributaries to the Blue Ridge Road, while the trade along the extent of the Knoxville and Kentucky Road will naturally continue along the shortest line to the Atlantic at Charleston. By the completion of the Chattanooga and Cleveland Road, and by a projected branch of the Blue Ridge Road from Citico Creek to Athens on the Georgia and East Tennessee Railroad, Chattanooga will be brought within twenty-three miles as far on Charleston as it is to Savannah over the Georgia Railroads. This Southwestern branch of the Blue Ridge Road may compete with the Georgia roads for the trade of Chattanooga, while the main road to Knoxville, having the advantage over Savannah of 103 miles in distance from Knoxville must engross the trade from that city and the country dependent upon it.

It is a misapprehension to suppose that the Blue Ridge Railroad is important only as tributary to the commerce of Charleston. The distance between the western limits of South Carolina and Tennessee, across North Carolina and Georgia, by the Blue Ridge Road, is only eighty-nine miles. Anderson is 195 miles from Knoxville, Greenville is 231, Abbeville is 240 miles, Newbury 275 miles, Columbia 322 miles, Winnsboro' 361 miles, Camden 384 miles, while Charleston is 410 miles over the projected junction of the Greenville and Columbia Railroad with the South Carolina Railroad, between New Market and Aiken, and is 453 miles from Knoxville by the way of Columbia. South Carolina imports corn, wheat, flour, bacon, lard, tobacco, whisky, salt, lime, horses, mules and cattle. East Tennessee, Kentucky, and Southwestern Virginia produce these articles in excess of the domestic con-

sumption. White corn is selling at one dollar a bushel in the country west of Columbia, it can be bought in Tennessee for twenty cents. A large portion of the bacon, lard and whisky which is consumed in this State, is brought from Cincinnati by way of Baltimore and Charleston. Hogsheads of bacon and hams, marked "Cincinnati," may be seen in the Depots of the Greenville and Columbia Railroad as far as Anderson. This bacon is carried 383 miles from Cincinnati too Wheeling by the Ohio river, when it is navigable, and 245 miles by Railroad when it is not. From Wheeling it is carried to Baltimore 380 miles over the Baltimore and Ohio Railroad, by sea 650 miles from Baltimore to Charleston, from Charleston 257 miles to Anderson, nine hundred miles by water, and seven hundred and fifty-two miles by railroad, being 1,670 miles in all. Or, if the Ohio is not navigable from low water, or being frozen, the carriage from Cincinnati to Anderson is 882 miles by railroad and 650 miles by water, being 1,532 miles. If the bacon is carried to Anderson by the way of New Orleans and Charleston, the distance from Cincinnati to Charleston is more than 2,000 miles by river and sea, and 257 by railroad from Charleston to Anderson. If it be carried from Nashville, the distance is 730 miles by railroad and more than 600 miles by the Ohio and Cumberland Rivers. If from Chattanooga, this distance is 575 miles by railroad and about 700 miles by the Ohio and Tennessee Rivers. By no other routes can Western produce be brought into South Carolina. By the Blue Ridge Railroad, the carriage of bacon, lard, whisky, flour and Tobacco from Knoxville to Anderson will be only 196 miles. The distance from Knoxville to all the other Western Districts of the State may be calculated from Anderson. These districts will be most benefited by the Blue Ridge Railroad. But by a calculation of distances by the three routes mentioned, compared with the distance of many other districts by the Blue Ridge Road, it will appear that a large part of the State should be as much interested as Charleston in the Blue Ridge Road.

Wheat is carried from Knoxville to Richmond, 453 miles, and then manufactured into flour. But the largest portion is carried 300 miles further by James River and Chesapeake Bay, to Baltimore, and there manufactured. Why might not the water power along the Greenville and Columbia Railroad, and especially at Columbia, be employed in successful competition with those cities, the cost of carriage being so much in favor of South Carolina. Columbia might, profitably, and should manufacture flour as largely as either of those cities. It has much greater water power than Richmond, and a similar locality in an elevated country, and a healthy climate, with an easy railroad carriage to market.

Cincinnati has become an immense depot

of provisions, because it has a shorter railroad connection with the Atlantic than other western cities; and Baltimore, the nearest place of export for them, engrosses a large share of that trade. Knoxville must also become the depot of a great trade in western productions, and Charleston occupy, in reference to it, the position of Baltimore to Cincinnati.

Statement of the Affairs of the Blue Ridge Railroad Company in South Carolina, on the 1st November, 1857.

EXPENDITURES.	
For construction.....	\$1,158,937 70
Iron .....	87,914 67
Engineering.....	133,544 41
Expense, salaries, printing, legal advice, expense of suit ads. Bangs & Co., &c.,	45,400 10
Real estate.....	7,718 51
Right of way, South Carolina.....	\$4,045 00
Do do Georgia.....	3,775 00
Do do North Carolina.....	1,630 00
Do do Tennessee.....	5,340 00
Interest on Mortgage Bonds, Loss on sales of Bonds and Stocks after deducting interest received from same.....	14,790 00 22,211 79
Road Bridges.....	17,651 80
Platform and Dirt Cars, and expense of Locomotive.....	812 44
Advances to sundry contractors.....	4,881 00
Sundry open accounts.....	37,784 05
Due by Anson Bangs & Co.....	15,995 20
ON HAND.	2,082 39
Notes of Anson Bangs & Co., secured by pledge of Stock and Mortgage Bonds.....	28,500 00
Stock in Rabun Turnpike.....	440 00
State Six Per Cent. Bonds.....	69,000 00
Cash.....	12,472 79
	110,412 79
	\$1,660,186 76

RECEIPTS.	
From Capital Stock—Installments paid in.....	\$1,133,116 30
Bills payable—Notes discounted, secured by pledge of State six per cent. bonds.....	20,000 00
Pendleton Railroad Company	57,020 69
Blue Ridge Railroad Comfy..	110 00
Bonds payable—For Real Estate.....	3,000 00
Interest due Anson Bangs & Co.....	623 96
Interest in suspense.....	1,025 78
Sundry open accounts.....	4,642 36
Due to contractors.....	10,204 16
Bonds of Knox Co. paid to contractors.....	5,844 86
Mortgage Bonds, issued to contractors.....	181,000 00
Stock—Full shares issued to contractors.....	88,200 00
Mortgage Bonds, due to contractors.....	15,215 98
Stock—Full shares, due to contractors.....	17,164 33
Bonds of Knox County, due to contractors.....	4,527 36
Amounts reserved as security for completion of contracts, viz:	
In Cash.....	\$25,725 04
In Mortgage Bonds.....	13,820 51
In Bonds of Knox County	7,172 17
In Stock—Full Shares.....	71,558 26
	118,475 98
	\$1,660,186 76

E. E. WM. H. PERONNEAU, Treasurer.  
Charleston, November 1, 1857.

Subscriptions to the Capital Stock of the Blue Ridge Railroad Company in South Carolina.	
By State of South Carolina.....	10,000 shares, \$1,000,000 00
" City of Charleston.....	10,490 " 2,049,000 00
" Individuals.....	2,787 " 278,700 00
" Full shares carried by contractors, issued, due or reserved.....	1,769 " 176,922 59
Shares.....	25,046 \$2,504,622 59
Received from State of South Carolina.....	\$600,000 00
City of Charleston.....	302,050 00
Individuals.....	31,066 30
Earned by Contractors.....	176,922 59
Due by State of S. Carolina.....	400,000 00
Due by City of Charleston.....	546,930 00
Due by Individuals.....	247,633 70
	1,194,563 70

\$2,504,622 59  
WM. H. PERONNEAU, Treasurer.



Charleston, November 1, 1857.  
Resources of the Company, exclusive of Subscriptions to Capital Stock.

State guarantee of Mortgage bonds.....	\$1,000,000 00
State aid to Pendleton Railroad.....	43,500 00
Private subscriptions to Pendleton Railroad.....	52,000 00
Private subscriptions to Blue Ridge Railroad Co., Georgia.....	3,600 00
Private subscriptions to Tennessee River Railroad Co., North Carolina.....	55,400 00
Tennessee State aid (for iron).....	540,000 00
Do do (for bridges).....	100,000 00
Subscriptions of Knox and Blount counties, and private subscriptions to Knoxville and Charleston Railroad.....	250,000 00
Mortgage bonds of the Company (first mortgage).....	1,500,000 00
	<b>\$3,544,500 00</b>

#### LORD BROUGHAM ON ACCIDENTS.

The following paper was read by his lordship at the meeting of the National Association for the Promotion of Social Science held at Birmingham, on Wednesday last:—

The time appears to be come, if, indeed, it has not long since arrived, when some effectual precaution should be taken for the security of life and limb in railway travel; and there are some propositions on this subject so manifest upon the least attention which can be given to it, that we may venture to begin by stating them, with hardly any demonstration.

1. It is undeniable that the vast extent of traffic renders it not only justifiable, but necessary, for the public authority to interpose and endeavour to prevent needless risks being run by the community.

2. It is not a valid objection to such interposition that the conduct of their business should be left to the companies themselves, and that the state has no right to interfere with private concerns. The concerns are not private. No railway can be established without an act of Parliament, and every such act gives powers, not only of an extraordinary, but of an transcendental kind to the undertakers. They are authorized to travel through men's lands without their consent, and to purchase those lands at prices not fixed by the vendor, but by a jury. They have many other privileges by special laws much in their favor, and against the law of the land, but enough has been said on this head when we state that all rights of property, all settlements by will or by marriage contract, all bargains previously made by the landowners, are utterly disregarded, and the whole is thrown under the power and at the mercy of the companies.

3. It is equally undeniable that when the safety of the public welfare is concerned we have no right to regard the interest or the caprices of one class any more than the interest or the good pleasure of the companies. Suppose it were admitted that certain arrangements are required to satisfy one, even a considerable body of persons, if those arrangements are plainly prejudicial to the rest of the travelers—not merely displeasing to them but perilous to them—the question is decided that such arrangements should not be permitted; and the only matter for consideration is how they shall be prevented.

4. It may be alleged that persons unconnected with railway administration are not sufficiently qualified to form a sound opinion upon the different matters involved in the inquiry whence arise the accidents so much complained of, and how they are to be prevented. But this being admitted as a general proposition, it may very likely be also quite true, that there are some things so palpably evident that any one is as capable of understanding them as if he had spent all his life at a railway board, and that no proof needs be given of

them, because they are next to self-evident.

Now, to apply these general principles, there wants but little consideration of the subject. In the first place, without the least railway experience, every one must be aware that the whole plant, and all the carriages and tackle of a railway is inevitably and constantly undergoing a great wear and tear, very much greater than in any other traveling establishment, because the great velocity of the movement unavoidably increases the friction exceedingly, and causes more jolts and other concussions which directly affect the rails, and the carriages, and the tackle. Secondly, the disposition of the companies will always be to grudge the necessary outlay for repairing damage and preventing its recurrence, because the amount of the dividend is the primary object in order to maintain the market value of the shares, an their manner of grudging it will be underrating the necessity. Thirdly, the damage occasioned by wear and tear has an unavoidable tendency to increase the geometrical progression, each injury, if not remedied, becoming the foundation of other injuries. Fourthly, if there can be pointed out a cause either certain, or very likely to produce injuries, either by increasing unnecessarily the wear and tear, or by augmenting the number of concussions, or by rendering them greater when the do happen, or even only by increasing the risk of their happening, that cause ought to be removed at once, instead of trusting to the efficacy of vigilant superintendence, or inquiring into the existence of injuries as actually sustained; because, such superintendence and inquiry may or may not prove effectual, whereas the removal of the cause must altogether prevent the evil, or greatly lessen its amount; and we are here speaking only of the wear and tear. Fifthly. Such wear and tear must, if not either prevented or remedied, occasion so great a risk of accidents as almost to become a certainty. Sixthly. The length of time that most of the great railways have been established makes it manifest that they have very much greater chance of accidents now than they ever had before. Seventhly. The prevention of accidents otherwise than by the effects of wear and tear, is most likely also to be secured by whatever lessens that wear and tear—as by accidents caused by concussions and by collisions.

Now, all these considerations point to one thing—the great speed of the movements; and it is too clear to require a word of proof that whatever lessens the speed diminishes the wear and tear, the injuries to the carriages, the risks of their running off the line, and if they do, of their being damaged, and the risks of collision either with other carriages or with fixed obstacles. It is enough to name the rates in order to be satisfied that they expose to serious risks of collision, and produce the certainty of great wear and tear. Hardly any rate is known in this country under an average of 40 miles an hour, while some have 50, and some as much as 60, or a mile a minute; and even where such is not the average, excessive speed is occasionally given to make up for lost time. So that an average of 40 implies occasionally one of 60, and an average of 60 one of 70, 80, or it may be more. Now, it is quite manifest that the risks are very great arising from such rapid movement, both by the damage done to the rails, carriages, and tackle, and by the accidents thence arising; and also where no mischief arises from the disrepair, from the collisions and other consequences of rapid movement, the prevention of such move-

ment removes the risk, and renders the traveling reasonably safe, even if a very considerable speed should still be permitted. Suppose the maximum of 25 or 30 miles an hour were fixed, and a prohibition of exceeding this in order to make up lost time; in a word, suppose the inconvenience to be inflicted upon travelers of arriving somewhat later at their journey's end, and of occasionally waiting at the station on account of some accidental delay not allowed to be prevented by increase of speed, can this be put in the balance and weighed against the absolute, or nearly absolute, security against bad accidents which would thus be given? That is the only question, and it does not seem to admit of much doubt. Let it be observed, that no reference has been made to the clear opinion given by the most experienced engineers, such as Mr. G. Stephenson, upon the too great speed being the cause of accidents, because it is better to rely upon the nature of the thing itself; and no testimony, nor any authority, is wanted to prove that such rapid motion must produce the consequences ascribed to it.

Then it remains to consider the justification of the proposed prohibition. The advantages of such traveling, as saving time, and thus giving valuable facilities to the transaction of business, as well as accommodation to persons bent upon change of residence or other pursuits cannot be denied. Nor can it be doubted that there are many who, if asked whether they would, for the sake of the speed, incur the risk, would answer in the affirmative. But it is equally undeniable that a very great majority of those who travel would prefer the security and declare themselves satisfied with a moderate speed—with going from London to York or Liverpool in eight hours, and to Edinburgh in ten. Why are they to be sacrificed because some others insist on moving with double that speed? It is a common remark of those who reflect little upon the subject, that if accidents happen it is the fault of the public, which calls for 50 or 60 miles an hour; and they add "*Volenti non fit injuria*." But the *volentes* are only few comparatively, and the body of the travelers—that is, the public—make no such demand. The anxious vigilance with which our law, like that of all civilized communities, watches over life is not to be lost sight of. Severe punishment is inflicted on any carelessness from which fatal consequences result, only less severe than what is inflicted when deliberate intention of mischief is proved. Nay, the act of self-destruction is regarded as a great offence, and whoever is so grossly negligent of his own personal safety as to occasion his death without intending it may be safe to commit an offence which bears the same relation to suicide as manslaughter does to murder. But suppose a person at the request of another puts him to death, the law treats this as murder, and the agent the murder, and the request of the deceased is not any kind of defence, and does not make the act manslaughter. These remarks apply first to the class who hazard their own lives in the desire to save time—they are incurring the moral guilt of an offence akin to suicide; but, next, the remarks apply to the same class as risking the lives of others, and thus committing a most grievous offence. It is manifest that the risk which they run themselves is no defence against the charge of involving others in the same hazard any more than a duelist stands acquitted of taking away his neighbour's life by the fact that he risks his own. But we have here to deal, not with the minority, or their



conduct in requiring the dangerous rate of traveling, our concern is with the supreme power in the state, the Legislature, which is bound to watch over the safety of the whole community, and to prohibit such conduct as exposes its safety to unnecessary hazards—hazards, too, of the grossest description. If it should be said that the fixing of a maximum speed, with the prohibition of exceeding it to make up for lost time accidentally incurred, would diminish the security of the public by making the companies more careless, the answer is, that this never could be the result as long as the present liabilities continued; because no one contends that, by fixing the maximum the law should declare the parties absolved from all other duty except that of not exceeding the prescribed rate. Every other neglect would be either punishable as an offence, or entail the reparation, by way of damages, according to the nature of the negligence; and it would be no kind of defence, nor even any matter of extenuation so as to mitigate the sentence in the case, if the party proved that the requisition of the law respecting speed had been scrupulously complied with. There can be no doubt that in France, Germany and Belgium, where the rate does not exceed twenty-five miles an hour, accidents are very much more rare than in this country. It can be as little denied that by better regulations time might be saved at the stations both here and in those countries. It may probably be found expedient for the benefit of both of the shareholders and of the public to introduce a better system of management by paying the functionaries more liberally, and casting more entire responsibility upon them, so as to suffer no interference of the unpaid directors. But this is a large subject, and connects itself with the whole railway administration as well as the branch immediately under consideration—the prevention of accidents.

#### IMPROVEMENTS IN THE MANUFACTURE OF IRON AND STEEL.

MARTIEN, BESSEMER, MUSHET AND UCHATIUS, AND THEIR PROCESSES.

Martien, then, appears to have originated the great discovery that pig iron can, whilst in the fluid state, be purified from carbon, silicon, and some other of its alloys, by forcing currents of air under it, so as to pass through and pervade its liquid particles. Martien, however, overlooked the grand feature of his discovery, namely, that when air, either cold or heated, is thus forced through a molten mass of cast iron, the temperature of the mass is rapidly raised, not so much by the combustion of its combined carbon as by the dellagration of the iron itself; and that when the carbon has been all or nearly all dissipated, the temperature increases to an almost inconceivable extent, so that the mass when containing only as much carbon as is requisite to constitute with it cast steel, and even when deprived of this small portion of carbon, and existing in the state of semi-malleable iron, still retains a perfect degree of fluidity. The announcement of this fact is the sum and substance of Bessemer's discovery. Perfectly simple in itself, it had been before the metallurgical world, both practical and scientific, for centuries; but it was reserved for Bessemer to develop the principle to its fullest extent; and in fact, though all the world knew that heated iron would dellagrate in the air with an intense generation of heat, no man but Bessemer had ever dreamed that

blowing cold air through melted iron, without the aid of additional fuel, would raise the temperature of that iron to a degree never before witnessed in metallurgical operations. A more brilliant and surprising discovery was never before published to the world. Let those who cannot appreciate a great invention, and have neither the energy, the talent, nor the perseverance to carry it out, condemn this invention; the inventor may rest assured that it will one day be acknowledged, and and ranked, not with, but above the great discoveries of Cort and Neilson.

Bessemer's process removes the carbon and silicon from the cast iron operated upon, and when the blast is properly adjusted, and a sufficient mass of metal is operated upon, the waste need not exceed 20 per cent., the remaining 80 per cent. being a kind of semi-malleable iron in a perfectly fluid state. When cast into blooms or ingots, and cooled, it is found that, according to the nature of the pig iron from which they have been prepared, these ingots possess either a bright, crystalline, and cold short texture; or they present a granulated fracture, exhibiting the cold, tough characteristics of the semi-steel described by the late Mr. Mushet, at page 525 of his work on iron and steel. In either case these ingots prove hot-short when forged, and, except at a high welding heat, they possess but little coherence. At the welding heat they may be rolled or drawn into bars, and these bars may be cut and piled, and be then again drawn into bars: but the original characteristics of the product are very slightly, if at all modified by these operations. The Bessemer iron is, therefore, not commercially valuable. The inventor had succeeded in expelling the carbon and silicon from cast iron, but the sulphur and phosphorus remained; and, worse than these, a portion of oxide of iron became diffused through the mass, and imparted to it the inveterate hot short quality which no subsequent operations could expel. In other words, oxide of iron may be alloyed with purified cast iron, whilst the latter retains its fluidity, but cannot be removed or altered after the iron has assumed the solid state; so that in operating upon pig iron, which contained only small doses of sulphur and phosphorus, the only hindrance to the complete success of Bessemer's splendid discovery was the presence of the disseminated oxide of iron, and that a new oxide, not known or recognized by chemists, who indeed, as a general rule, know little or nothing about iron and its Protean habitudes.

Bessemer failed, however, to surmount this seemingly trifling but really formidable obstacle, and the consequence was, that though he had made one stupendous step in advance of the whole metallurgical and scientific world, he nevertheless lost all credit, because he was unable to take the second step towards complete success. He was, and I suppose is still, condemned as a visionary schemer, who has advanced a fallacious idea, and has failed to carry it out. So, however, says the voice of the many, which, I need hardly observe, is usually the voice of a zany.

The Bessemer discovery being thus, at least for a time, shelved and arrested in its progress, it seems to have occurred to an individual of the name of Mushet that if fluid metallic manganese, with or without an accompanying alloy of iron and carbon, could be presented to the fluid Bessemer iron and alloyed therewith, whilst both retained their fluid condition, that a portion of the manganese thus alloyed would, from the powerful affinity of that metal for oxygen, unite with the oxygen

of the oxide of iron disseminated through the fluid Bessemer iron, and pass off as slag, leaving the mass free from the obnoxious oxide of iron, and removing the hot short quality of the iron. At the same time, by restoring a portion of carbon to the purified mass, the mixture would become steel, free from any red shortness, and capable of being extended into sound and marketable bars. Mushet carried his ideas into practice, and with success. I have seen bars of steel thus produced from coke pig iron which possessed incredible toughness, and from which tin plates were made, of a quality superior to those manufactured from the finest charcoal iron. The blooms passed the rolls at the usual temperature without a flaw or crack, and perfectly free from blemishes. These tin plates, some of which I have seen, were rolled by Mr. Thomas Allaway, the eminent tin plate manufacturer at Lydney, a station on the South Wales Railway. I have seen also miner's tools, such as chisels, mandril points, and hammers, made from this steel, and all of excellent quality, whilst the steel welds and works as readily as the best double shear. Mushet patented his discovery, and it has been before the public for half a year or more; and yet not one print, literary or scientific, has condescended to notice it. So it lies a spark amongst dry faggots, that will one day light up a blaze which will astonish the world when the unfortunate inventor can no longer reap the fruits of his life-long toil and unflinching perseverance.

I say literally, "light up a blaze," for when the fluid metal from several blast furnaces is run into one gigantic purifying chamber, and there purified by high pressure blast forced through the molten iron till the mass is converted into a seething lake of liquid semi-malleable metal, the spectacle thus presented will prove to be one of the grandest sights ever witnessed, and when the semi-malleable but still crude metal shall receive its proper dose of iron, carbon and manganese, poured into it, from a separate blast furnace, and the crude mixture shall at once become, as by magic, cast steel of excellent quality, then will the triumph of the inventor's process be complete. Henry Bessemer will then get credit for his despised process, and Robert Mushet will be remembered for his invention, which at present is not deemed worthy of any attention whatever.

I now come to what is termed the Uchatius process, but which would be more properly designated as the process patented by Uchatius. The process is a beautiful one, and, under certain conditions a very valuable one; but the patentee has, like Mr. Bessemer, come before the public with a half-fledged process. I have naturally worked a little upon the atomic plan of steel making, and my experience is this:—With good charcoal, pig iron and pure ankerite, a good serviceable cast steel may be produced, and the pots will stand one round pretty well, unless the quality of the steel be very soft, in which case it will be found no easy task to pour the steel over the edge of the pot, as its sides, just above the metal, will be found garnished with a number of eyelet holes, more curious than pleasant to behold. At the second round, the sides of the pot and its contents usually, vanish the former retiring amongst the clinkers upon the fire bars, and the latter descending into the cellar, and refreshing the cinders beneath with copious showers of granulated steel. This destruction of the melting pots is the only drawback to the success of the process, when



charcoal, pig and pure ankerite are used. This, however, like the oxide of iron in Bessemer's process, is a fatal drawback, and until Captain Uchatius can remedy it, he has something to learn. When coke pig iron is operated upon, matters become tenfold worse, for the large quantity of slag in the iron half fills the pots and exits its way through the sides at the second or third fire, and though the ingots obtained can be drawn into bars, and the bars even welded, yet the steel cannot be tempered so as to possess any useful properties, as a tool, or cutting instrument of any kind. If we attempt to save the pots by making high steel, the steel cannot be tempered; and if we try to make steel which can be tempered, we destroy the pots.

I cannot say that I sympathize with Captain Uchatius's shortcomings as I do with Bessemer's, because I think he had the opportunity of availing himself of experience which would have shown him how to avoid

"the troubles which environ  
The man who meddles with hot iron."

An erudite abbe, M. Pauvert, has since patented several processes for filling, as it seems to me, the melting pots with all sorts of alkalis and earths, packed in the interstices of the charge of metal, and which will infallibly hasten the destruction of the pots themselves, and utterly debase and destroy the quality of the steel.

#### EXPLOSIONS OF LOCOMOTIVE BOILERS.

CONCLUDED.

"A crust of salt frequently forma upon the pans. The cessation of ebullition (if the deposit occurred over the furnace) was the consequence, and the bottom of the pan became red-hot. The manner in which the scale was disengaged, was to strike it with the edge of a heavy iron pricker, which allowed the brine to reach the plate. It was also frequently broken by the expansion and bagging down of the plates, leaving the crusts above like an arch. In such cases, the plate was seen, for a moment to be red-hot, and immediately afterwards, an immense column brine was projected from the pan, the steam evidently being of great elasticity.

Mr. Parkes had seen a yard square of the scale burst, the whole surface of the scale being of a glowing heat. Had the pan being closed like a steam boiler, he conceived that the blow of the steam on the roof, bottom, and sides, would have destroyed the vessel.

A thin plate of copper at Mr Parke's work had a hole burst through it by the sudden action of steam thus generated. He conceived that similar phenomena might and frequently did occur in steam boilers."

These incrustations are constantly forming upon steam boilers, and when they reach a certain thickness, interfere greatly with the transmission of heat, the iron beneath them becomes red-hot, and expanding cracks the deposit over it, water is admitted, and explosion occurs in the manner related above.

A careful chemical analyses of these deposits and of the water used, would, we think indicate means for preventing them, and would thus increase the efficiency and safety of the steam-engine, for the same deposit which causes the danger, diminishes the evaporating power.

If the water spaces at the sides of the fire box are too narrow steam may be so rapidly generated there as to drive the water up, and this cess would be aided by the property of heated iron to repel water, which from the experi-

ments of the Franklin Institute, seems to commence to show itself at the temperature of 334° Fahrenheit, and to increase rapidly as the temperature rises above that point. This may go on until this part of the boiler, being filled only with dry steam becomes intensely heated. So long as the steam is rapidly generated it will continue to drive the water out of the narrow space, and no evil result will follow, unless the pressure of steam becomes too great for resistance of the iron, diminished as it is by the heat. But when, by opening the furnace door, or closing the regulator, the energy of the fire is diminished, and steam is generated less rapidly, the water falling back upon the heated plate, flashes into steam and bursts the boiler.

May 2nd, 1848, a stationary engine exploded in Philadelphia from this cause; the explosion taking place after the furnace door was opened and the fire had gone down. A stationary boiler exploded at Middletown, Connecticut, January 26th, 1841, twenty minutes after it had been set in motion. The cause assigned was an undue heating of the space between the fire box and the outer shell, this space being but two and a half inches. The explosion was exceedingly violent, throwing the whole boiler two hundred to two hundred and twenty feet into the air. †

From the peculiar form of locomotive boilers the part referred to being, in them, the narrowest, and at the same time the weakest portion, explosions might arise in them from this cause. Owing also to the position of the different sides of the shell of the boiler at this point, where the inner end of the stay bolt is exposed to the intense heat of the fire, and the outer end to the external air, the irregular expansion and contraction of the iron of which they are composed must tend greatly to change their texture and diminish their strength.

It is difficult, however, in many cases to decide upon the precise cause of locomotive explosions. The engineer, who might give the most valuable information, is most frequently killed by the accident, and the causes of the catastrophe can be inferred only from the wreck; but it seems perfectly clear that a great majority of them do not arise from a gradual increase of pressure in the boiler, and that against most of them the safety-valve is no protection. In all the cases to which we have alluded, there is one common characteristic. This consists in a sudden, an instantaneous development of a large quantity of steam which the safety-valve, even were the steam to strike it before the injury was done, would be wholly inadequate to give immediate vent to. But in almost all, if not all of these cases, the boiler is burst before the wave occasioned by the sudden generation of steam has had time to strike the valve.

According to Laplace, the conducting power of steam at a pressure of four atmospheres, and a temperature of 294 1-10 Fahrenheit, is 1041.34 feet per second, and of water 6036.88 feet per second. The ratio of these different velocities is 1 to 5.7. If then, owing to a low state of water, the upper tubes were heated, and water suddenly poured upon them from the pumps, the wave occasioned by the sudden generation of steam at the surface of the water would be transmitted down through the water with a velocity of 5 3.4 times as great as it would upwards through the steam, and thus burst out the bottom of the boiler, before the safety-valve was touched. When this rapid generation of steam is occasioned by the separation of incrustations, or from nar-

row side spaces, the bottom or sides of the boiler being so much nearer the origin of the wave, the injury would of course be done before the valve could be reached.

In almost all cases of explosions of locomotive boilers, while in motion, it will be found that the force of the explosion is downwards and is very violent; that occurs under circumstances that can not be explained on the theory of a gradually increasing pressure occasioned by an overloaded valve, but that it is caused by a sudden development of power, some of the causes or supposed causes of which we have indicated.

It has been proposed to place a valve at the bottom of the boiler as a safeguard against this peculiar form of explosion, but this suggestion has never, to our knowledge, been carried out. Fusible plugs have been used as a protection against those explosions which are caused by a low state of the water. In France these plugs are formed of alloys of tin and lead with a small quantity of bismuth, in such proportions as will insure fusion at a temperature somewhat below that of molten lead. Great importance is attached to these alloys, and in order to secure certainty as to their proportions, they are prepared at the mint. Fairbairn advises the use of a lead rivet, one inch in diameter, immediately over the fireplace, and is of opinion that the less frequent occurrence of boiler explosions in France than in England, is owing to the fact that in the former country the fusible plug is more frequently used.

The only other means of safety at present available are care on the part of the engine driver, that the water is kept at its proper level, and the boiler is free from incrustations, and on part of the engine builder that the side spaces and the space between the tubes are made so wide, as to prevent the steam forcing all the water out of them and thus bringing about the same state of things at the bottom of the boiler as a low state of water does at the top.

EMILE WITH.

☞ The "Galveston News" of August 4, says:—

"We learn that Mr. James Converse, who has been engaged for the last two and a half years as Chief engineer of the G. H. and H. R. R., leaves here for the North, on Thursday next, and will return about the 1st of January.

"Mr. Converse, having, for the present, closed his engagement with the above company, it is but justice to him to say that, during the time of his residence among us, he has not only secured the confidence and esteem of all who have enjoyed the pleasure of his acquaintance, but has established an enviable reputation as a thoroughly scientific and practical engineer, and a man of indomitable perseverance under all difficulties, in carrying out successfully whatever he undertakes. He has our best wishes for a pleasant trip in his visit to his friends, and for a safe return among us, where his services are so much needed."

Mr. Converse passed through this city, on November 20, on his way to Mississippi, where we learn that he designs spending the winter.

☞ The Ohio and Mississippi R. R. Co., have purchased the St. Louis Hotel property, corner Third and Race streets, in this city.

† Franklin Journal, January, 1842.



## MONETARY AND COMMERCIAL.

We have nothing new to add to our last week's remarks on the Money market. The panic is past, but confidence is still wanting. There is not so much fear for investments already made, as a disinclination to make new ones. Capital is in moderate supply, but is held in reserve till matters become more firmly settled. Collections from the country come in more freely than before, though not yet as freely as they should have done.

In New York, we notice as favorable a condition of things as could be expected. Capital is abundant and specie increasing. Advices from Europe are considered favorable.

Stocks in the eastern markets were a little firmer, especially State Stocks whose interest is paid promptly.

## SALES AT THE NEW YORK STOCK BOARD—Nov. 30.

17,000 N. Y. State 6s, '73.....	110
10,000 N. Y. State 5s, '74.....	98
5,000 Michigan 6s.....	90
3,000 Ohio State 6's, '86.....	103
3,000 North Carolina State 6's.....	87
1,000 Tenn. State 6's, '90.....	85
11,000 Illinois Central R. R. Bonds.....	87
4,000 Terre Haute and Alton 2d mort. Bonds.....	50
10 shares New York Central.....	75
20 " Pacific Mail St. Co.....	68½
5 " Del. & H. C. Companies 30.....	104½
250 " Cleveland & Toledo.....	42
125 " Chicago & Rock Island.....	78
20 " LaCrosse & Milwaukee.....	113½
410 " Illinois Central.....	94
200 " Harlem R. R. stock.....	6
60 " Erie R. R.....	153½
300 " Reading.....	53½
65 " Mich. Cent.....	38½
50 " Mich. S. & N. Ind.....	17½
50 " Panama.....	87
15 " Galena & Chicago.....	79
50 " Milwaukee & Miss.....	26

## INDIANAPOLIS,

Terre Haute, Lafayette, Chicago,  
AND THE NORTH-WEST.

INDIANAPOLIS AND CINCINNATI  
SHORT LINE RAILROAD

## VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

## THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

Chicago Express.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

Accommodation.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

Night Express.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jackson, Duwille, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

## VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

## T. F. RANDOLPH &amp; BRO.

Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,

CINCINNATI, O.

## The Great Arnold Secret Discovered at Last

BUTLER'S MERCANTILE  
RECORD AND COPYING FLUID INKS.

Ledgers & Records only. For Books, Letters, &c. For Letter Press only

## MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial

Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

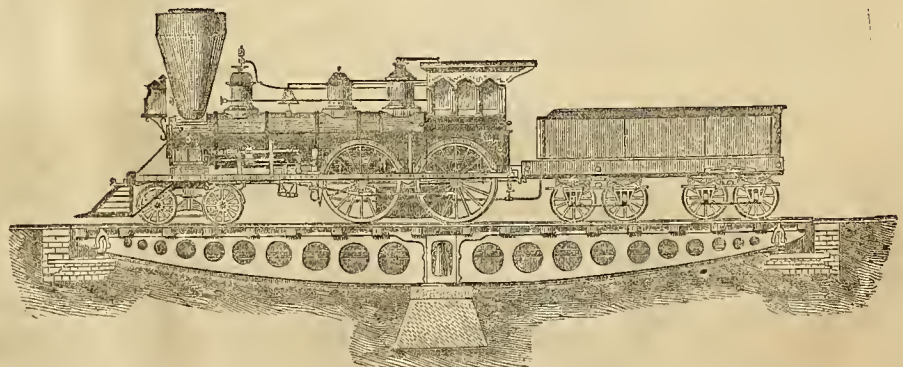
N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers &amp; Co.

—LATE—

## BANCROFT &amp; SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING AND SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of Engineers and Machinists' Tools; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills, Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, Jr.



**GENERAL  
RAILWAY SUPPLY AGENCY.  
SNOOK & HILL'S PATENT  
LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.**

☞ Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap:3 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**  
**Mechanical Engineer,**  
AND  
AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

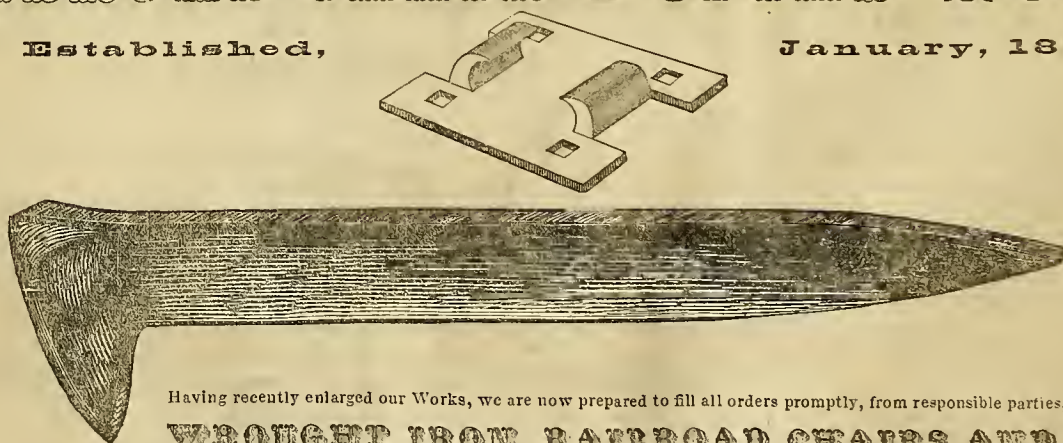
Entrance 5 Tryon Row.  
Applications for Letters Patent. Careful written  
Opinions of Inventions. Important aid in bringing out  
inventions. oc:2

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an Improved Method. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, and can do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

an 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



# Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE  
Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA AND NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville. For Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route.

#### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

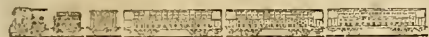
**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Memphis, Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:32 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

Superintendent Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

These subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrels, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE & LEAVITT.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

### EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 8:30 P. M. Evening Express, through to Bellair and Pittsburgh without change of cars.

#### FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Accommodation, leaves Cincinnati at 4:40 P. M., for Springfield and Columbus.

This train also makes connections for Wilmington, Lancaster and Zanesville. This train stops at all points between Cincinnati, Springfield and Columbus.

**FOURTH TRAIN.**—Cleveland, Pittsburgh and Wheeling Night Express, leaves Cincinnati at 8:30 o'clock P. M., for all the Eastern cities.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

#### FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House; or at the Old Office, south-east corner Broadway and Front, opposite Spencer House; or at the Eastern Depot.

E. F. FULLER, General Ticket Agent.

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omni-bus L

Office No. 2 Burnet House.

Jan2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,

Jan8 1y

119 Walnut st., Odd Fellows' Buildin

## Summer Arrangement. 1857. Cincinnati, Hamilton & Dayton [TRUNK LINE.] RAILROAD, FOR THE NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24. THROUGH TICKETS FOR

PITTSBURGH,	INDIANAPOLIS,
PHILADELPHIA,	TERRE HAUTE,
CLEVELAND,	ST. LOUIS,
DUNKIRK,	LAFAYETTE,
BUFFALO,	LOGANSPORT,
NIAGARA FALLS,	CHICAGO,
NEW YORK,	BOSTON,

And to all Eastern and Northwestern Cities.

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day. WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPORT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wahash Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

### "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia; arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS** Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

### Only Night Train out of Cincinnati FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

#### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.**

Baggage checked through.

#### RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:35 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

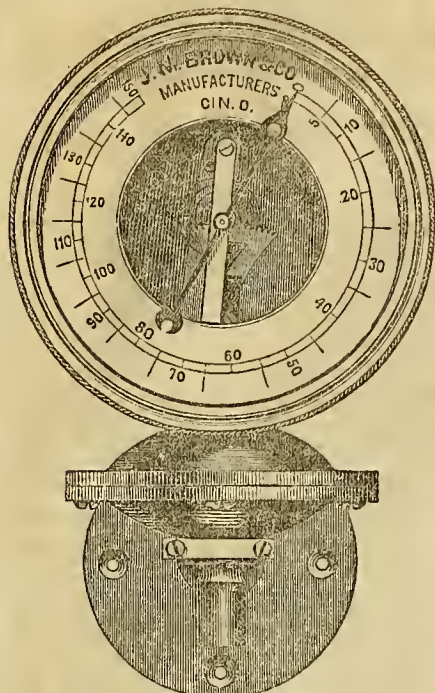
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent;



**J. M. BROWN & CO.,**

MANUFACTURERS OF


**IMPROVED**  
**Corrugated Steel Spring Gauges,**

FOR

**LOCOMOTIVES AND STATIONARY ENGINES.**

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsvill, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
 250 East Front street, Cincinnati, O.


**Prosser's Patent**  
**LAP-WELDED**  
**IRON BOILER TUBES,**

every article necessary to  
**DRILL THE TUBE-PLATES**

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whetstone Brushes. Tubes for Artesian wells, Pump Shafts, Linc Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
 52 PLATT STREET, New York.

**Norris' Locomotive Works.**

**PHILADELPHIA.**

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
 Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
 RICHARD NORRIS & SON.

**IRON BOILER FLUES**  
**PASCAL IRON WORKS.**
**MORRIS, TASKER & CO.,**  
 Manufacturers of

**LAP-WELDED BOILER FLUES,**  
 1½ to 7 inches outside diameter, cut to definite lengths as required.

**WROUGHT IRON WELDED TUBES.**  
 From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc  
 Warehouse, 85 South Third St.,  
 PHILADELPHIA.

**RAILROAD IRON.****LOCOMOTIVES.**

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons  
 rails 49 lbs. per yard. 1,000 tons rails 55 lbs.  
 per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '66-2m. J. H. GOODMAN & CO.,  
 No. 7 Wall st., N. Y.

**RAILROAD CAR**

AND

**COACH TRIMMINGS.****DOREMUS & NIXON**

No 21 Park Place, and 18 Murray st.,

NEW YORK,

**IMPORTERS**

OF

**Plain and Figured Mohair Plush.**

Printed &amp; Tinted do., Entirely New Designs;

**MOQUETTES & VELVET CARPETS;****Enameled Cloth, for seats & backs of Cars****ROPE MATTING, Every Width.****Oil Cloths for Head Linings, Enameled with Gold and Silver;****DUCK CANVASS FOR CAR ROOFS;****Plush Buttons, Nails, Webbing, etc.; Curled Hair, in Rope or Picked;****PATENT FELT,****FOR CUSHION & MATTRESS FILLING**

N. B. We have the Plush in bond for exportation  
 sep18 **DOREMUS & NIXON**

**W. G. ATKINSON,**Civil Engineer, Surveyor & Draftsman.  
 CUMBERLAND, MD.

**RAILROAD** routes located, planned, and estimated  
 Maps and Reports furnished; Researches made for  
 Coal, Iron, Copper, Lead, or other Minerals,  
 Metals, etc.

Contract work on Tunnels and heavy Graduation estimated and reported in detail. Topographical drawings executed and lithographs supplied by skillful artists  
 Mines explored, new Works laid off, and Geological plans prepared. mal 1, y

**The Kentucky Military Institute.**

**DIRECTED** by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty

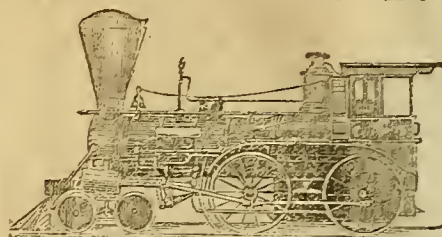
The course of study is that taught in the best Colleges, with the addition of a more extended course in Mathematics, Mechanics, Practical Engineering and Mining Geology; also in English Literature, Historical Readings, Book-keeping and Business Forms, and in Modern Languages.

The nineteenth semi-annual session opens on the second Monday in September (8th Sept.), 1856. Charge, \$102 per half yearly session, payable in advance.

The reconstruction and extension of the buildings will make room this session for additional students, who have the past year been necessarily declined.

Address the Superintendent, at "Military Institute, Franklin county, Ky.," or the undersigned.

Aug 14 17

P. DUDLEY,  
 President of the Board
**CINCINNATI**  
**LOCOMOTIVE WORKS.**


The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
 ap.20 **MOORE & RICHARDSON.**

**Railroad Car Findings**  
**BRIDGES & BROTHER,**

64 Courtlandt Street, New York.

**Wheels & Axles, Jaws Boxes, and Casting Fitted****Wrought Nuts, Bolts, and Washers,****Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws.****LOCOMOTIVE ENGINE LANTERNS**

From the best Manufacturers, and at their prices. Ca  
 Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
 Of any required width to 124 inches.

**ENAMELLED HEAD LININGS****Plush and Curled Hair.**

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue; Putty, Varnish and Glue Brushes  
 Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Bahhitt Metal.

**Portable Forges and Jack Screws.**

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

**ALBERT BRIDGES,**

Late Davenport & Bridges, Car Manufacturers.  
 Cambridgeport, Mass.

**ALFRED BRIDGES,**

Late Davenport, Bridges & Co., Fitchburg, Mass.  
 feb.6.

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**

**WOULD** respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—arc simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the lowest price.

Prize L. (The highest prize) awarded to the McGowan's Patent Pumping Engine at the late da Ohio Mechanics' Institute. June 18, 1855 F1



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....DECEMBER 10, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Strsst,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " per month.....	3 00
" " six months.....	12 00
" " per annum.....	20 00
One column, single insertion .....	4 00
" " per month.....	10 00
" " six months.....	40 00
" " per annum.....	80 00
One page, single insertion.....	10 00
" " per month.....	25 00
" " six months.....	110 00
" " per annum.....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 42.

#### EDITORIAL.

Dubuque & Pacific Railroad.....	638
Georgia Railroad State Aid.....	638
Maysville and its Railroad Bonds.....	638

#### RAILROADS.

Buffalo, Bayou and Columbus—Texas.....	638
South Atlantic Trunk Line .....	638
Railroad Insurance.....	638
Central Southern .....	639

#### MISCELLANEOUS.

Commerce and Navigation of the United States...	637
Peoples' Bank, Louisville .....	638
Fruits of the Railroad System in France.....	640
International Bridge Company .....	641
Beaume's Gas Flame Furnace .....	641
Missouri State Bonds .....	642
New Iron Steam Ship.....	642
Monetary .....	644
Wages.....	638

#### MONEY AND STOCKS.

Sales at the New York Stock Board.....	644
Monetary and Commercial.....	644

#### "DE BOW'S REVIEW," FOR DECEMBER.—

This Number completes the 23d Semi-Annual Volume, and it will be a favorable time for new subscribers to record their names. The offices are at Washington City and New Orleans. Back numbers or volumes can be supplied. The first thirteen volumes are condensed into a work of three volumes, entitled "Industrial Resources of the South and West;" price, \$6. Subscription price of the Review, \$5. The Editor urgently calls upon subscribers for arrears. The December number contains interesting papers upon the South and the Union, Central America, Texas, A Southern University, Slave Laws of the South, the Present Financial Crisis, Cotton grown in Foreign Countries, California, Mississippi, etc., etc.

VOL. 5.—No. 42.

### COMMERCE AND NAVIGATION OF THE UNITED STATES.

The Report on the Commerce and Navigation usually furnished to Congress, is always an interesting document, and will be peculiarly so at this time, when the operation of Foreign Commerce has so evidently brought on the financial embarrassments of the country. The results of trade, as it regards the exact balance in the exchange of products, were thus:—(as stated in the *N. Y. Times*.)

Foreign Goods Imported.....	\$348,428,342
Domestic Goods Exported.....	\$278,906,713

Actual balance of trade against the United States .....	\$69,521,629
---	--------------

In order to meet this balance, we Exported in American Gold.....	\$60,078,352
In Foreign Gold.....	\$9,058,570
	\$69,136,922

Thus this balance of trade was settled in gold. In addition, we imported about three millions of foreign gold more than we re-exported, which makes an apparent balance in our favor. The substance of the whole is, that we took from other countries *sixty millions* in goods more than we sent them in products of our own industry, and made that up in gold. Here some persons will console themselves with the idea that we paid for it in our *own gold*. True, but the point is, not that we produced the gold, but that the *functions* of gold are totally different from those of any other article, and for it there is no substitute. Gold is not a thing to be eaten or worn. It is a legal tender for debts. It is a representative of capital. It is a basis for credit. If we lose all our wheat, we can live on corn and potatoes; but if we lose gold, we have no substitute. We can substitute nothing for it. In this exportation of gold, we have lost exactly *what we would have gained* by retaining it; and what would we have gained? We would have gained the *basis* of at least two hundred millions of credit. What would be the effect at this time, if this two hundred millions of credits had been retained? In all human probability the Banks would not have suspended, and but very few of the failures would have occurred. Had our foreign importations been sixty millions less, and our gold sixty millions more, the effect on the commercial public would have been almost inculcable. Not a thread in our commercial fabric would have snapped, and the current of commerce would have run as smooth as ever. Nevertheless what has happened may be as beneficial as if all things went on in high credit. Commercial revolutions seem a salutary discipline to commerce itself, and there is no way of stopping the flood of extravagance, luxury, and debt, but the hard way of stopping credit itself.

The nett loss of gold by the trade of 1855 and 1856, after deducting the import of foreign gold, was:—

In 1855.....	\$41,536,803
In 1856.....	\$56,575,123

It is obvious we cannot afford to go on long at this rate.

It will be interesting to note the several products we have reported, and the manner in which we are able to pay such large amounts.

Products of Grain .....	\$55,626,832
Products of Animals.....	16,738,458
Fruit and Vegetables.....	413,644
Tobacco .....	20,260,772
Cotton .....	131,575,839
Rice .....	2,290,400
Products of the Sea .....	3,729,644
" " Factory.....	33,054,556

Of this whole report, more than *three-fourths* were the products of the Mississippi Valley. Yet thus affording the great basis of a foreign trade, without which the trade would be very little, what has the Valley of the Mississippi derived from Government aid, against the tene of millions expended on foreign commerce? It is true that the aid of Government is not needed in the West, except in such aid as may be given to the rivers and bridges of the West. But for this very reason, what can be done by the Government for the interior, should be done.

New York is the chief importing place, and New Orleans the Chief exporting. The former is the great distributor of foreign goods, and the latter of cotton. The following table shows the position of the chief cities in this respect; we mean of actual exports, (excluding gold,) viz:—

	Imports.	Exports.
New York.....	\$228,550,000	\$80,900,000
New Orleans.....	91,533,000	91,509,000
Philadelphia.....	6,838,000	17,850,000
Boston .....	44,840,000	12,181,000
Baltimore .....	10,581,000	12,405,000

The chief consumers of Cotton are Great Britain and France. The principal consumers of Tobacco are Germany, England, and Cuba. The latter manufactures a great deal of our Tobacco. The chief consumers of bread-stuffs and provisions are Great Britain, France, and Canada.

The tonnage built in the United States for 1856-7 were as follows:—

Maine .....	110,933
New York.....	67,826
Massachusetts .....	55,411
Pennsylvania.....	34,258
Ohio.....	22,665
Maryland.....	20,826

There is good deal of tonnage built in the other States, but the above comprises the bulk. It will be seen that Ohio is the fifth State in ship building.

The total amount of American tonnage is about *five millions of tons*. Of this, 705,000 tons are in the Steamer Marine, which at this time comprises about 2,000 vessels. The tonnage of the United States is now greater than that of any nation except Great Britain, and is nearly equal to that. Our Commercial Marine is divided between three great classes of trade, viz:—the Coasting, the Foreign, and the Fisheries. In the Coasting or Interior trade may be included the Steamboats, most of which are employed on the rivers. The Coasting trade also includes our Lake commerce, within *our own country*. The Canada commerce is, however, very great



and is increasing beyond that of any other part of American trade. Along the shores of our great lakes must eventually grow up a great internal commerce, unequalled by anything of that kind in the world.

The survey of American commerce leads us to grand ideas of the American future. It is scarcely half a century since we were fairly launched out on the great commerce of the world. Since that time our commerce has enlarged nearly six fold, and there is no port of the civilized world in which our sails do not whiten the ocean, and our flag proclaim to the world the American Republic. Our commercial increase must foster, then our population, and so does our industry, which is, in reality, the basis of it. The introduction of steam machinery, that vast element of modern Mechanics, has done more for America than any other portion of the world. It suits our great rivers and lakes, and supplies the extra power required for the introduction of new and diversified manufactures.

**SOUTH ATLANTIC TRUNK LINE.**—We observe a movement towards the completion of the great Trunk Line of railroad running parallel with the Atlantic coast. It is proposed to make a connection between the Charleston and Savannah R. R. and the Savannah, Albany and Gulf R. R., by a branch from its commencement to Fernandina.

#### RAILROAD INSURANCE.

We understand that the Buckeye State Insurance Company of this city, are about to introduce a new feature in life insurance in this country—to insure the lives of railroad travelers. This has formed an important and profitable business in England, but has never been attempted in this country. The Charter of the Buckeye State Insurance Company gives the Company the right to insure against fire or injury on stationary and moveable risks, on live stock and on human life. We trust that the undertaking will be found to be profitable both to the company thus making the pioneer effort and to the public. We have always felt that railroad companies have been compelled, without cause, to act the part of insurance companies to travelers too long. Railroads are conceded to be the best, safest, quickest, and surest method of traveling. And when they meet with accidents, which may and do happen in *all* modes of traveling, they suffer loss enough in broken machinery and injured employees without being made to pay damages to every passenger who has a sprained ankle or a bruised arm. They make the passenger no charge for thus insuring him as they have done. We regard this effort of the Buckeye State Insurance Company as the beginning of a change in public sentiment, which shall put railroads on a par with other modes of travel, and be of great benefit to

stockholders. It will moreover be of direct advantage to the traveler. Instead of recovering damages after a series of tedious lawsuits, in case of accident he will receive at once from the insurance company the amount for which he has paid the premium.

Railroad men and the public should share their appreciation of the effort by a ready support given to the Company. And the Company should so fix its rates, that every traveler may be induced to insure, and that its business may yet be made profitable.

#### MAYSVILLE AND ITS RAILROAD BONDS.

An interesting suit is now pending between the holders of the city of Maysville Railroad Bonds and the Council of the city in relation to the payment of the interest on the bonds. The Council declined to levy the tax necessary to meet the interest on their bonds, and the bondholders have filed a petition in the Mason Circuit Court, asking a mandamus to compel the Council to levy the tax. The Council answer to the petition, that the Company through gross mismanagement has failed to render the consideration for which the bonds were issued. The matter will undergo judicial investigation, but the whole attempt looks upon its face as a bold effort at repudiation. The decision will be looked for with interest.

#### IMPROVEMENT OF THE FALLS OF THE OHIO.

A petition has been forwarded to Congress, praying for some action in relation to the improvement of navigation around the falls of the Ohio at Louisville. The petitioners represent the Louisville and Portland Canal as inadequate to meet the wants of the river trade, and pray for another Canal on the Indiana side. The petition is numerous signed.

☞ The St. Paul (M. T.) Advertiser gives the tonnage of steamboats running in the St. Paul trade at 18,749 tons to 96 steamboats.

DINSMORE'S AMERICAN R. R. GUIDE.—We

are in receipt of this valuable guide to the American traveler on the American railroads, and we find it up to the times. The latest changes of time tables are noted, and the whole is brought to the period when it goes to press. Dinsmore issues two editions per month, and for his care in compiling correct information, deserves the thanks of the traveling public.

**GREENVILLE & FRENCH BROAD R. R.**—At a convention of the friends of this road, held at Warm Springs, resolutions were adopted, urging the Directors of the road to place the remaining sections under contract at the earliest possible moment, and suggesting that subscriptions should be received, payable in work in place of cash.

#### GEORGIA RAILROADS STATE AID.

A Bill has been introduced into the Georgia Legislature to aid the construction of the Georgia Air Line Railroad, the Macon and Brunswick Railroad, the Savannah, Griffin and North Alabama Railroad, and the Ellijay Railroad.

The bill provides that the State shall endorse the first mortgage bonds of the Companies, to the amount of 7,000 dollars per mile of road built, on condition that the Companies shall first prepare twenty miles of road bed with cross ties and other timber, at their own expense and without any lien or mortgage. The bill also provides that the Governor may, at his discretion, endorse a sufficient amount of bonds not exceeding seven thousand dollars per mile of road to be built, to purchase the iron for the whole road, provided he deems the price of iron low enough to justify such proceeding. The bill requires the Companies to pay the interest on the bonds promptly, and to pay into the State Treasury two per cent. per annum, as a sinking fund.

#### WAGES.

We understand that the wages of the employees on the New York and Erie and on several other rail roads, are to be materially reduced. A measure like this would come with a better grace, if the officers had first reduced their own sometimes enormous salaries. Twenty-five thousand dollars a year to a president, who is no better fitted for the office than many a man who could be had for a great deal less, would pay ordinary wages to a good many faithful engineers, who are just as necessary as presidents. The reductions in salaries should take place with the highest first.

L. S. NASH, Esq.—We observe that our old friend, L. S. Nash, Esq., has been giving an able lecture on the geology of creation, to the citizens of Logansport. It is spoken of as a highly interesting and able effort.

**DUBUQUE AND PACIFIC R. R.**—This company offer for sale construction road and land grant bonds, bearing interest at seven per cent, payable semi-annually. The road runs westerly from the city of Dubuque to Sioux city on the Missouri, and with the branch to Tete Des Morts, 10½ miles, forms a total of 331½ miles. It is open to Dyersville, and will soon be open to Manchester, 50 miles. The land grants amount to 3840 acres per mile of road.

**NEW YORK CENTRAL R. R.**—The recent election for Directors of this road has resulted in the re-election of the old Board. So that for another year at least, its management will not be placed in Wall St. We are glad of it.



## Railroads.

### CENTRAL SOUTHERN R. R.

We are in receipt of the Second Annual Report of the Central Southern R. R. Co.

The Central Southern Railroad commences at the Tennessee and Alabama Railroad, in Maury County, one mile south of Duck River, and forty-three and one-half miles from Nashville.

About two miles from the Junction, after crossing the Hampshire and Mt. Pleasant Turnpikes, it passes through the south-west corner of the town of Columbia, and follows to the northern line of Alabama, with slight variations, the route described in my report of April, 1855, as the "Dodson's Gap and Ford's Creek Line," where it meets the Tennessee and Alabama Central Railroad of Alabama, extending from the State line to the Memphis and Charleston Railroad at Decatur. This route having been formally adopted by the Board, as the one on which the road should be built, an engineering party was organized the 1st of October, 1856, to make the final location, and prepare for commencing work. About the same time proposals from contractors were advertised for.

The location was finished to the southern line of Pulaski, plans, profiles and estimates were prepared, and about December 15th contracts were closed for nearly all the grading and culvert masonry, from the Junction to Pulaski. What remained unlet at the time, together with the dressed bridge masonry for Robertson's Fork, Richland and Pigeon Roost Creeks, was shortly afterward put under contract, and all the work to Pulaski is to be finished by March 1st, 1859.

The grading and culvert masonry was principally taken by planters living on the road, who do the work at cash prices, and receive twenty-five per cent. of their estimates in stock of the Company at par.

Work was commenced about January 1st, 1857, and with a single exception, all the contractors will easily complete their sections in the prescribed time. The heavy cutting through Dodson's Gap has not been prosecuted as efficiently as it should have been.

No arrangement has been made for building the bridges over the principal streams, nor will it be advisable to have them put up much before they are wanted for use. In view of the necessity of making such important structures in the very best manner, it will be most judicious to build them of pine from the Ohio river, or from Georgia. It can readily be done without delaying the completion of the road, and the bridges will be so far superior in safety and durability to those of any timber in the vicinity, as to warrant the increased cost. To build an insecure or

unreliable railroad bridge, however cheap, is the worst possible economy.

In addition to the bridges for carrying the railroad over streams, two are required for carrying turnpike roads over the railroad: one near Columbia, on which the Mt. Pleasant Turnpike crosses, the other near the residence of David Reynolds, Esq., in Giles County, for the Columbia and Pulaski Turnpike. The masonry for the former is already built, for the latter it has lately been commenced.

The cross ties are not contracted for, from the high price at which lumber is held along the road, and the unwillingness of parties owning it to furnish ties at what we consider fair rates. The ties for the Tennessee and Alabama Railroad, from Spring Hill to the Junction, are to be delivered at Nashville and brought over the railroad to the points where wanted, and further examination must determine whether it is more economical for this Company to bring its ties from Cumberland river by the Tennessee and Alabama Railroad, or to buy a timbered tract of land and get them out at its own expense. If timber could be had sufficiently low, it may be found advantageous to use ties of any kind of wood, after submitting them to some of the patented processes for preserving. They have been tried with excellent effect on some railroads, and if found to operate well will be very valuable in this climate, where most varieties of wood decay with great rapidity in exposed situations.

In February and March last the final location and estimates were made from Pulaski to the Alabama line, and a verbal report made to the Board at its May meeting. In this occurs the only serious obstacle on the road—the tunnel through Madry's Ridge. It is to be 1,280 feet long, and the grade of the railroad passes 203 feet beneath the surface of the ground. It will be taken out twenty feet high, and fourteen feet wide in the clear, and be worked without shafts from the two ends. The time necessary to complete the tunnel will be at least one year longer than to do the other work, hence the Board authorized it to be commenced, and a contract has been made with J. H. & W. L. Hoblitzell & Co., for completing it by March 1st, 1860.

Elk River Bridge is another important structure occurring on this part of the road, for which the Legislature authorized a loan from the State of \$85,000 of State bonds.

The work south of Pulaski, excepting the tunnel, can easily be finished by March 1st, 1859, (the time for completing the contracts from the Junction to Pulaski,) if the finances of the Company justify it. Before that date the Alabama and Tennessee Central Railroad will be running from Decatur to the point of meeting this road at the Alabama line, and a large increase of business could be obtained

by continuing tracklaying from Pulaski to the north end of the tunnel section, and also laying it from the Alabama and Tennessee Central Railroad to the south end, thus leaving a break of less than one mile, which might readily be filled by laying a temporary track over Madry's Ridge, similar to that used so successfully in 1853 over the mountain at Kirgwood, on the Baltimore and Ohio Railroad.

Ample station grounds have been secured at Columbia and Pulaski at reasonable cost, and at Pleasant Grove without charge. At other points where the business of the country demands accommodation, the necessary ground can probably be obtained by release. The depot buildings at Columbia and Pulaski should be of brick, and they should be prepared next fall. The lumber also should be sawed and piled several months before wanted for use. Durable, substantial and convenient buildings, if begun in time and built at suitable seasons, will cost little if any more than frail and inconvenient ones.

The Junction with the Tennessee and Alabama Railroad being the terminus of this road, is the proper place for the engine house, turn-table, water station and repair shop for locomotives. The turn-table and water station should be permanent and complete for any service that may ever be required of them, but the engine house may be commenced on a plan to accommodate two or three locomotives at first, and be enlarged as their number is increased. These buildings and fixtures should be provided in time to accommodate the rolling stock when tracklaying is begun.

The Central Southern Railroad Company will be entitled to receive ten thousand dollars per mile of Tennessee six per cent. bonds at par, to be used for providing and laying down the rails, furnishing the rolling stock and equipping the road. They can be applied to no other purpose, and the cost of right of way, station grounds, grading, masonry, clearing and grubbing, cross-ties, engineering, etc., or the local work of the railroad, must be provided from other sources, as well as any deficiency of the State loan to iron and equip the road.

Before any bonds can be drawn, thirty miles must be prepared for the track, and sufficient good and solvent stock subscribed to put the remainder of the road in the same condition. Afterward, whenever ten miles or more additional are ready for laying track, the Company can draw additional bonds for the length so prepared.

The distance to Pulaski—35½ miles—was put under contract at the commencement, but until an additional 4½ miles are graded, making 40 miles in all, bonds can only be drawn for 30 miles.

#### ESTIMATES OF COST.

##### Local Work Construction.

From Junction to Pulaski—35½ miles.....	\$391,125 72
From Pulaski to end 40 miles—4½ miles....	48,139 96

Amount for 40 miles.....	\$439,265 68
--------------------------	--------------



From end of 40 miles to Alabama line, exclu-  
sive of Elk River Bridge..... 163,639 98

Amount not including Elk R. Bridge.....\$602,905 66  
Estimate of Elk River Bridge..... 80,300 00

Total amount for local work—70 miles.....\$683,205 66

As the cost of the bridge is provided by the State, the amount to be raised by the Company for local work is \$602,905 66.

#### TRACK AND EQUIPMENT CONSTRUCTION.

Iron for track and laying same 50 miles, at  
\$8,300.....\$415,000 00  
Equipment, rolling stock, etc., per report of  
April, 1855..... 125,200 00

Amount for track and equipment.....\$540,200 00  
Add local work..... 683,205 66

Total for 60 miles.....\$1,223,405 66  
or an average of \$24,408 11 per mile.

A subject deserving the careful consideration of the stockholders is, whether the Company shall accept the loan of State bonds, or adopt some other means of raising the necessary amount to iron and equip the road.—The present worth of the State loan is not more than \$7,200 per mile, less by more than one thousand dollars per mile the cost of furnishing and laying the iron alone, but for which the State holds a first mortgage on the road and equipments, worth when complete at least \$25,000 per mile.

With bonds having thirty years to run, the Company will have paid as follows at their maturity:

\$60 per annum for thirty years is.....	\$1,800
Exchange and commissions for paying out, $\frac{1}{4}$ per cent.....	27
Principal at maturity, with exchange and commission.....	1,015
	\$2,842
Deduct amount received.....	720
Paid in 30 years for use.....	\$2,122

which is \$70 77 per annum, and 9 83-100 per cent. per annum on \$7,200, amount realized, from which it appears that by accepting the State aid, the Company, after mortgaging their property for little more than one-fourth its cost, pay very nearly ten per cent. per annum for the actual value received.

It would seem that among the many wealthy persons interested in this enterprise, enough could be found to take bonds of the railroad Company, secured by a first mortgage on the property and franchises of the corporation, to an amount equal at least to one-half the cost of the road at a rate less oppressive to the Company than the State loan. If \$12,500 per mile are issued and sold at 80 per cent., they will realize \$10,000, while the purchaser will have received at their maturity at the rate of 8  $\frac{1}{2}$  per cent. on his investment. The Company would also be relieved from paying interest in New York.

The citizens of Louisville have lately come to the relief of the Louisville and Nashville Railroad Company, by purchasing from them at par, \$300,000 of Louisville City bonds at a time they were unsaleable. If those interested in the Central Southern Railroad would act in the same patriotic spirit, and carry out the plan indicated, or a similar one, it would give the road \$130,000 of cash means more than the State loan. This sum would be of

immense benefit about the time of opening the road.

Below is a table of distances which may be found useful for reference:

Nashville to Junction and Central Southern R. R.....	43 miles.
Central Southern Railroad—Junction to Alabama line.....	50 "
Alabama line to Decatur—by Ala. and Tenn. Cen. R. R.....	27 "
Nashville to Decatur.....	120 "
Decatur to Memphis.....	188 "
Do New Orleans, via Holly Springs, &c.....	525 "
Do Mobile, via Corinth and M. & O. R. R.....	424 "
Do Stevenson.....	83 "
Do Pensacola, via Montgomery, Ala.....	310 "
Do Louisville, Ky.....	234 "
Do Henderson, Ky.....	264 "
Huntsville to Nashville, via Stevenson.....	173 "
Do do do Decatur.....	144 "

A railroad from Decatur in the direction of Pensacola will be the shortest from Middle Tennessee to the coast, and the inhabitants of Central Alabama are greatly interested in its construction. From Montgomery to Pensacola, 160 miles, two-thirds of the grading is already done, and the road will be running between those cities in two years. From Decatur to Montgomery is about 150 miles, and probably no other road can be built contributing so much to develop the resources of Alabama, and it is fair to infer that in two or three years from the completion of this road, continuous lines of railway will be in operation from Cleveland and Chicago on the Lakes, to Pensacola on the Gulf of Mexico, of which the Central Southern Railroad will form a part.

When finished it will exhibit the unusual spectacle for these days, of a railroad constructed by the people living on its route, who are to receive whatever benefit may be derived from it, and who are abundantly able and expect to pay what it costs.

The following is the financial statement of the Company:

NOVEMBER 1st 1857.	
Dr.	ASSETS.
Cash Subscriptions—Unpaid.....	\$380,042 23
Construction ".....	6,347 41
Local Work Construction to-wit:	
Clearing, Grading and Culvert	
Masonry.....	\$65,314 40
Masonry—Bridge.....	7,205 30
Bridging.....	617 00
Depot Grounds.....	1,850 67
Right of Way.....	150 00
Engineering Department.....	7,760 88
Contingencies.....	2,827 43—85,725 68
Bills Receivable.....	399 95
Individual Accounts.....	50 00
Cash.....	4,209 52
	\$476,774 79

Cr.	LIABILITIES.
Capital Stock, to-wit:	
Giles County.....	\$275,000 00
Corporation of Columbia.....	30,000 00
Individual Subscriptions.....	133,600 00
Construction.....	16,657 72—455,257 72
Bills Payable.....	1,292 94
Dis. Int. and Exchange.....	35 26
Contractors—Amounts retained.....	20,188 77
	\$476,774 79

Receipts and Disbursements for the Year Ending November 1, 1857.	
Dr.	RECEIPTS.
Cash on hands per last report.....	\$87 50
Subscriptions—Amount paid in.....	\$55,658 22
Bills Payable—Note discounted.....	1,000 00
Right of Way—Timber sold.....	5 00
Engineering Department—Sales of camp equipage.....	27 58
Discount, Interest and Exchange—Interest received.....	80 21—57,771 11
	\$57,858 61

Cr.	DISBURSEMENTS.
Engineering Department.....	\$ 6,647 59
Office Expenses.....	274 60
Printing and Advertising.....	157 60
Depot Grounds.....	256 10
Right of Way.....	115 00
Bills Payable.....	1,231 63
Incidental Expenses.....	2,228 85
Bridging.....	71 00
Contractors.....	42,566 62
Cash (on hands,).....	4,209 52
	\$57,858 61

President, Thomas Buford, Lynnville, Tennessee; Secretary and Treasurer, John Baird, Columbia, Tenn.; Chief Engineer, A. Anderson, Nashville, Tenn.; Resident Engineer, D. J. Johns, Lynnville, Tenn.; Office of the Company at Columbia, Tenn.

#### FRUITS OF THE RAILWAY SYSTEM IN FRANCE.

One of the most important revolutions effected by railways in France consists in the conveyance of provisions to large centres of population. On the three lines of Paris to Orleans, Paris to Lyons, Lyons to Marseilles, the quantity of milk alone conveyed amounts to 60,000 tons. This item of consumption is now brought to Paris even from a distance of 150 miles; butchers' meat is received from a distance of 168 miles; and fruit, pulse, and garden produce in general arrive in Paris from all parts of France, without distinction of distance. The circulation of goods of all kinds on the principal lines amounted in 1854 to 373,497 tons on the Northern; to 260,443 tons on the Eastern; to 220,834 on the Western; to 293,692 on the Paris and Lyons; to 210,000 on the Lyons to the Mediterranean; and to 220,555 tons on the Orleans and adjoining lines. The following shows the proportion in which the latter line alone provides Paris with certain articles, viz:—Firewood, 6,035 tons, or forty per cent of the consumption of Paris; charcoal, 12,442 tons, or seventy-nine per cent.; flour, 85,707 tons, or sixty-two per cent.; seeds, pulse, 18,332 tons, or forty-nine per cent.; grain, 134,001 tons, or thirty per cent; wool, 8,227 tons, or forty-eight per cent.; wines, 96,116 tons, or eighty-two per cent. The following are the ratios of the rapidity of conveyance and cost:—

Rapidity per Hour.	Price per Kilom. Passen- Goods.
	gers. per ton.
Fast trains..... 25 to 72 kilom.....	61..... 7 30
Good trains..... 15 to 30 ".....	3..... 3
Roads..... 3 to 16 ".....	10 to 12..... 20
Rivers and canals. 2 to 20 ".....	3 to 5..... 3 to 5

As regards the price of conveyance, therefore, canals may still bear competition with railways, when time is of secondary importance. Indeed, although much of the traffic which was formerly monopolized by rivers and canals has been transferred to railways, that on canals still continues to increase. Thus, in 1853, the conveyance on rivers and canals was 2,192,886 tons, and in 1854 it was 2,235,975. As railways were originally intended only for the conveyance of the produce of coal mines and ironworks, these two branches of trade have been benefited by them to an enormous extent. Thus, while the coal mines in the basin of the Loire only produced 683,000 tons in 1830, their produce in 1854 rose to 2,000,000 tons. On the Northern and Eastern lines the quantities of coal conveyed in 1853 were respectively 369,000 and 162,000 tons; in 1854 they rose to 594,000 and 329,000 tons. In the district of St. Etienne, the quantity of cast-iron produced in 1834 did not exceed 8,300 tons; but the railway having introduced a saving of



from eight to ten per cent. in the conveyance of the ore from the borders of the Rhone, the produce rose to 10,400 tons in 1842, and is now upwards of 40,000 tons. On 1st of January, 1854, the total number of carriages on all the French lines was 3,587, offering accommodation for 118,482 passengers; the number of wagons for goods was 21,415, capable of containing 130,000 tons. The conveyance of goods has been constantly on the increase since 1850, as will appear from the following table:—

Years.	Conveyance of Goods. Tons.	Receipts for ditto.	Per Cent. to Receipts.
1850	4,271,057	59,758,186fr.	31.78
1851	4,627,189	66,108,001	32.93
1852	5,377,834	79,103,086	35.21
1853	7,172,652	92,365,697	38.71
1854	8,804,501	102,228,658	42.92

Under the denomination of "goods," the above figures comprises thirty-two per cent of coal, seven per cent. of iron and other metals, and four per cent. of cotton and woollen fabrics. Paris absorbs upwards of one-third of the traffic of the lines branching out from it; out of one hundred tons of merchandise, twenty are brought to Paris, and thirteen are sent from that city. Nor does there seem to be any limit to the traffic on railways; for, in 1854, the number of passengers was fourteen per cent. more than in 1853, and that year showed an increase of nine per cent. over 1852; and although the results of 1855 and 1856 are not yet published, enough of them is known to enable us to conclude with certainty that there was a further advance in those years. On those lines where there are but two classes of vehicles, the proportion of the first class tickets to the total is from thirteen to fourteen per cent.; of the second class eighty-six to eighty-seven per cent. Where there are three classes of vehicles the proportions are: first class ten per cent.; second, twenty-four per cent.; third, sixty-six per cent. The number of tickets delivered at Paris is twenty-four per cent. of those delivered on the whole line. The gross produce of the railways of France in 1856 was 281,000,000 fr., representing about one-seventh of the whole budget of France. The value of shares and bonds now in circulation is 160,000,000 fr., the amount of dividends paid to shareholders in 1856 was 120,000,000 fr., of which, either by direct or indirect taxation, 33,046,176 fr. have gone to the State, and a still greater amount of profit will accrue to the latter in future, owing to the new law imposing a tax on transfer of shares.—*Galignani.*

#### INTERNATIONAL BRIDGE COMPANY.

A regular meeting of the Commissioners is called for Saturday, the 5th inst., at which time the books for subscription to the capital stock of the association will in form be opened. The charter granted by the Legislature of New York makes the capital stock \$1,000,000, with privilege of increasing it to \$2,000,000. An act of the Canadian Parliament authorises the same amount of capital stock on the part of the Canadian Association, and appoints nine Commissioners to act with the same number authorised by the American charter. This will be the first formal meeting of the Commissioners, who will adjourn from time to time. An Executive Committee was appointed on the part of the Canadian Association, some two weeks since, of which Mr. Christie, M. P. P., acts as Chairman.—This committee, with several American Commissioners, met at the Clarendon, in this city, on the 24th ult. Mr. Ross, engineer and superintendent of the Victoria Bridge at Montreal, and of the Grand Trunk Railroad, was

present, with other prominent Canadians. A desultory conversation on the part of the members of the two corporations was had on the subject of the building and ultimate success of the bridge. The result of this discussion was, that a proposition could be submitted and adopted on the part of the Association, that will finally lead to the construction of the bridge in an expeditious, permanent and substantial manner.—It is expected that at the meeting on the 5th, a form will be given to this proposition, which will then be made public. We have reason to believe that it will be more productive than the stock of the present Suspension Bridge Company, so far as the revenue derived from the traffic of railroads is concerned. The Great Western Railway rents the Suspension Bridge at the stipulated price of \$45,000 a year, for the privilege of running its freight and passengers over it. And it is believed the receipts for the carriage-way amount to \$49,000—making an annual revenue of \$94,000 from these sources. We have no means of knowing the amount received from foot passengers, though it is large, and we may say, without fear of contradiction, that on a capital of \$700,000, it pays larger dividends than any stock company we are acquainted with.

The friends of the International Bridge, at Buffalo, are sanguine of success, and that its stock will be equally good as an investment. The Lake Huron Railroad Company, with its present business, would produce a revenue equal to \$40,000, to the proposed bridge.—Running through the very garden of Canada, it is already bringing to our city its products, which are rich and abundant in variety. This road will be extended in the spring through to Goderich, when Buffalo will be brought within 395 miles of Saut St. Marys. It will then deposit in Buffalo, the rich minerals from that heretofore far-off region. The passenger traffic along this road, already rapidly increasing, will be quadrupled on its extension, and its business fully equal in amount to either line of rail leading west of this point. We might furnish a large amount of statistics to sustain the opinions and convictions of sound men in the success of this projected bridge. They look to the past few years, comparing them with similar periods in the future, to find a wide field for speculation.—The growth of our city, and the rapid extension of the western States in population and agriculture, as well as the success of the present facilities furnished by the various railways, all point to the necessity of extending those facilities, especially on routes where distance is lessened and points more easily reached. The Lake Huron route shortens the distance to Detroit and to the upper lakes half a day's journey by railroad, and opening into points where a large amount of travel and freight is to be had, its success in competing with other lines can be safely calculated upon. The probable increase of business may be estimated from the following statistics:

The annual report of the Board of Trade, of this city, for the year 1856, gives the amount of exports to, and imports from Canada during a period of five years, ending Dec. 31, 1856, which amounts to \$8,008,172.

The same report states that there was brought over the State Line Railroad to this city, property to the value of, in

1853.....	2,234,273
1854.....	6,397,923
1855.....	10,068,384
1856.....	16,422,506

This road, connecting as it does with southern Michigan, forms around the south shore of Lake Erie, a great through line from Chicago. There is passed along its line a large traffic and travel, to be ultimately diverted on to this Canada line on account of less distance to Buffalo. In addition to this, there is much to favor the success of this proposed bridge, in the prospective growth of Buffalo, compared with the past twenty years:

Population.	Estimated.
1835.....19,715	1860.....100,000
1840.....21,838	1865.....130,000
1845.....34,656	1870.....180,000
1851.....49,764	1875.....250,000
1855.....74,214	1880.....300,000

Can any one doubt the importance of the proposed bridge to this city, or doubt its feasibility and value as a productive stock. The structure is to be a tubular one of iron, like the Victoria Bridge at Montreal. It will be an attractive sight that will draw hundreds of thousands to see and pass over it. A large annual revenue will ensue to the company from this single source.

We look with much interest to the proceeding of the Commissioners who assemble at the Clarendon on Saturday next.—*Buffalo Commercial.*

#### BEAUFUME'S GAS-FLAME FURNACE.

M. GUESNET, Admiralty Engineer, and M. Sochet, Directeur of Naval Construction, both of Cherbourg, France, have made a report upon a gas-flame furnace, the invention of M. Beaufume, from which we condense the following information.

In accordance with an agreement dated 23rd Feb., 1856, M. Beaufume delivered at the port of Cherbourg a heating apparatus constructed according to his new system. This apparatus has been applied to the boiler of the Northern Forge at that port, where experiments were made with it.

Instead of burning the fuel directly below the boiler, M. Beaufume first transforms it into gas in a separate apparatus; and then conveys this gas to the boiler, where its complete combustion causes the generation of the steam. This separate apparatus, which M. Beaufume terms a gasifier, consists of a furnace constructed very like that of a locomotive, with a water-space substituted for the tube-plate. Coal is heaped upon the fire bars to a considerable height; say 20 to 28 inches, according to the quality of the coal. The air necessary for the gasification is supplied in suitable quantities below the fire bars, by means of a blowing fan. The oxygen of the air supplied causes very active combustion amongst the lower layers of coal in contact with the fire bars, converting the coal into carbonic acid gas; and this gas in passing through and amongst the upper layers, which ought always to remain black, converting the coal into carbonic oxide and accumulates in the upper part of the furnace mixed with nitrogen, and doubtless hydrogen also. These gases, the temperature of which is but slightly elevated, are conducted to the boiler through a wrought iron pipe, and enter the boiler furnace after having been thoroughly mixed, in a chamber termed the burner, with a suitable proportion of air supplied by the blowing fan. After having been once ignited in the boiler furnace, the gases continue to burn as fast as they are supplied. The flames produced, act on the heating surface of the boiler; and the gases remaining after combustion, pass through the flues and escape into the atmosphere under the pressure due to the blowing fan, no chimney being required.



The gasifier, in consequence of the water space with which it is surrounded, is itself a small boiler, the water in it absorbing the heat developed in the gasifying process, and utilizing it by forming a considerable quantity of steam, which is added to that of the large boiler. The furnace of the gasifier is supplied with fuel through a passage in the top of the apparatus, this passage crossing the steam space and opening into the furnace, whilst it is fitted with doors or valves at both extremities, so that the fuel can be introduced into the furnace without opening a communication with the atmosphere.

A few simple and inexpensive alterations required to be made in the brickwork setting of ordinary boilers in order to adapt them for being heated by gas. The fire bars being removed, a brickwork platform is constructed in their place, and on this platform a number of brickwork passages are formed, with openings arranged to allow a portion of the ignited gases to come directly into contact with the boiler surface. These passages are quite indispensable, and form what may be called a heat regulator. They heat the gases, which, arriving in too cold a state would not be completely burnt did they not come in contact with highly heated surfaces before being ignited.

The boiler of the forge is of 12 horses power; it has a total heating surface of  $167\frac{1}{2}$  square feet, and when arranged in the ordinary way, it has a grate surface of  $12\frac{1}{2}$  square feet.

The gasifier supplied by M. Beaufume has a grate surface of  $5\frac{1}{4}$  square feet, and a depth of fuel of  $27\frac{1}{2}$  inches can be placed in it. The total height of the apparatus, including the ash-pan, &c., is  $11\frac{1}{2}$  feet; and, taking extreme external measurements, the space occupied amounts to 290 cubic feet. To place the apparatus, and to allow sufficient room for attending to it, a space measuring at least 10 feet by  $6\frac{1}{2}$  feet is required, without including that taken up by the blowing fan and the donkey engine which drives it. The cylinder of the donkey engine is 3.9 inches diameter, and the stroke 7.9 inches, while the maximum speed is 170 revolutions per minute with a pressure of five atmospheres, the blowing fan being made to turn at the rate of 1,000 revolutions per minute, by a belt and pulley. The blowing fan is 2 feet in diameter by 1 foot in width, and the pressure of the blast produced when the fan makes 1,000 revolutions per minute is equal to a column of water 1.97 inches high.

The Beaufume apparatus requires more attention, and gives perhaps a little more trouble than an ordinary boiler; still an ordinary fireman is quite capable of attending to it.

When the boiler and gasifier are cold, that is, when the fire has been extinguished for more than twelve hours, it requires considerably more time to get up the steam than with the ordinary furnace—about twenty-five minutes. At the same time, when the fire in the gasifier can be kept in during the intervals between working hours, as M. Beaufume proposes, this inconvenience does not exist.

The Beaufume apparatus has also another inconvenience which is felt every time the fuel is stirred. This operation necessitates the opening of small apertures for the introduction of the poker, permitting large quantities of carbonic oxide to escape, the presence of which in the boiler house is injurious to the firemen, unless the atmosphere is renewed with sufficient rapidity.

Finally, there are miniature explosions

which take place on igniting the gases in the boiler furnace, when the precaution is not taken of shutting off the supply of air until the moment when the light is applied, and when in consequence, the furnace and flues are filled with carbonic oxide mixed with air. There is, however, not the slightest danger attending these explosions.

In order to obtain a standard for comparison, preliminary experiments were made with the boiler heated by the ordinary furnace, to ascertain what quantity of steam per lb. of coal could be raised under these circumstances. The brickwork was in rather a bad condition, and only 4.85 lbs. of water were converted into steam of a pressure of 5 atmospheres per lb. of Newcastle coal.

When employing the same coal, on applying the Beaufume apparatus, the quantity of water converted into steam of a pressure of 5 atmospheres per lb. of coal, which was increased at each experiment in consequence of repeated improvements in the working of the apparatus, finally reached 8.26 lb. This shows that the Beaufume apparatus realizes a saving in fuel of 41 per cent in the production of a given amount of steam. It is, however, necessary to make a deduction for the steam used by the donkey engine driving the blowing fan, which reduces it to about 7.8 lbs., a result which still shows a saving of 33 per cent.

In these two series of experiments the production of steam was estimated by the quantity of feed water used—doubtless a very imperfect method—but the only one at command.

During the whole of the experiments with the apparatus the consumption of smoke was complete, a very light smoke only being seen to issue from the chimney when the fuel was stirred, caused by the temporary production of an excess of gas compared with the air supplied. This smoke was almost imperceptible, and moreover lasted but for an instant.

During this series of experiments it was ascertained that the temperature of the residuary gases on leaving the flues was still sufficiently high to melt zinc; there was, therefore, undoubtedly, a considerable loss of heat, as these gases should not have had a temperature of more than  $150^{\circ}$  Centigrade ( $302^{\circ}$  Fahr.) This arose in consequence of the heating surface being insufficient.

Further experiments were made with the Beaufume apparatus, but with other than Newcastle coals, in all cases giving very advantageous results.

#### MISSOURI STATE BONDS.

The Legislature of Missouri is now considering the subject of providing for the January interest of the bonds of that State. This is a matter in which the people of Illinois have a special interest, inasmuch as the major part of our bank issues is based upon Missouri bonds. The whole amount of bonds authorized by law to be issued is \$24,950,000. Of this there had been issued up to the 13th of October \$15,930,000, and it is not probable that an additional amount has been issued since then. A bill passed the House on Monday last, proposing to limit the issue to this figure, saving, however, a further issue of the following sum:

\$750,000	to the North Missouri R. R.
476,000	" Iron Mountain R. R.
400,000	" Pacific (Kansas stem).
500,000	" Pacific (S. W. Branch).

\$2,126,000

There is also due to the Pacific Railroad (South-West Branch) a balance of guarantee bonds amounting to \$3,800,000. Should the now pending bill pass the Senate the total of Missouri indebtedness will be as follows:

Railroad bonds to be issued.....	\$5,926,000
Miscellaneous bonds.....	602,000

Total.....\$22,458,000

The *St. Louis Republican* supposes that there will not be for some time any further issue of bonds even should the above mentioned bill pass, except the \$2,126,000 for which it provides. This would make \$18,056,000, the interest on which the State will be responsible for. The present actual debt drawing interest is \$16,532,000, which at six per cent. per annum, is \$991,920, payable semi-annually (January and July 1st.)

Of this amount, \$604,800 is payable on account of bonds issued to the Hannibal and St. Joseph and Pacific Railroad Companies.

On account of Hannibal and St. Joseph.....	\$180,000
" " Pacific.....	424,800
	\$604,800

The report from the first named of these Companies is, that it will pay the interest chargeable to it. The large and increasing receipts of the Pacific Road encourage the belief that it can manage to pay the whole of the interest chargeable to that Company.

The *Republican* thinks that "by the imposition of an additional mill or mill and a half tax, and drawing on funds which have been hitherto otherwise appropriated, there can be no difficulty in meeting the interest which the State will have to pay. Revenue Anticipation Bonds will no doubt have to be issued. But these, on our supposition, if the ability of the State is properly understood, will sell easily at a high figure."

We shall probably know within a day or two the final action of the Missouri Legislature on this subject. We have no doubt whatever but that it will be of such character as to preserve the credit and good name of the State.

**NEW IRON STEAM-SHIP.**—There is now in course of construction, at the premises of the South-wark Iron Works, a small steam-ship, built of iron, upon a new principal, which the builders believe will accomplish an average speed of from 25 to 30 miles an hour. The invention, for which a patent has been obtained, is intended to be applied to special transit vessels only, and is not suitable to river steamers or other vessels intended to be used where the water is shallow or the channels uncertain. Should the expectations of the builders be realized, a vessel built and fitted in the manner proposed can make the voyage from Liverpool to New York in five days, or from Liverpool to Melbourne in 40 days. The novelty of the invention consists for the most part in constructing the vessel so that the centre of gravity is placed below the water line. This is effected by constructing a chamber called a "well" all along the bottom of the vessel, in which the machinery, coals, and stores can be deposited. As it is not proposed that the vessel shall carry cargo the centre of gravity will thus become a suspended instead of a supported body; and it is believed that this peculiar formation will materially decrease the area of resistance of the water. The sides of the vessel rise perpendicularly from the well; and although the appearance of the vessel at present is anything but graceful, the patentee is of opinion that her form is constructed to secure the greatest amount of speed compatible with safety. The



improvements proposed to be carried out may be shortly described as follows:—1. Vessel built according to this plan shows a decrease in the area of resistance to the water fully thirty-five per cent. when measured against any other vessel of the same breadth of beam and draught of water, thus ensuring greater speed. 2. They have a better disposition of the centre of gravity, a consequent increase in stability, and a decrease in the amount of oscillation, enabling them when required to carry a larger quantity of canvass than other vessel of the same size. 3. The engines are so constructed as to effect economy in space and weight, causing also a saving of coals equal to a sixth of the consumption of other marine engines. 4. The screw propeller possesses greater power of propulsion than any other propeller yet introduced, by at least thirty per cent. 5. Attached to the engines is a powerful steam signal whistle, so constructed as to give out a code of signals, by which captains of ships may communicate with each other, by sounds perfectly intelligible, at a distance of three or four miles apart. The object of this portion of the invention is to prevent collisions at sea during dark nights or in foggy weather. The novelty in the steam propeller is confined to the manner of fixing the fans, so that each blade when revolving will clear the other of back-water. This adaption is extremely simple. The introduction of a buoyant drum or boss, in which the root of the fan is fixed, also reduces the weight of the shaft by about two-thirds. The trial vessel, which will be ready for launching in a few weeks, is of 60 tons burthen, and when fitted with her engines and stores will weigh only 14 tons. She is formed of plate iron one-eighth of an inch thick, with angle irons an inch and a half thick, and ribs 15 inches apart. The inventor proposes to take her to New York when finished. There can be no doubt that light iron steamers without cargoes and driven by high pressure engines, can attain a very great speed in passing through the water, but it would be premature to assert that the vessel now building will realise all the anticipations which the builders have formed of her powers. If she does, she will be the precursor of great informs in steam navigation.—*Morning Post*.

#### RAILROAD LAW—PAYMENT OF INTEREST.

The Cincinnati Commercial gives the following substance of a recent interesting decision on this question:

"A case has been pending for some months at Hamilton, Butler county, in which the mortgagees bring suit against the Eaton and Hamilton Railway Company, to enforce the payment of delinquent interest. The case was decided a few days since, and we have received no authorised report of the points made by the Court, but we are informed that the decision was in substance.

"That, the mortgages relied upon were valid as against the company.

"That, the entire property of the company being insufficient to pay the debts, it was a misapplication of the income of the road to apply it to the discharge of other debts, to the exclusion of the Bond holders.

"That, a floating debt, though honestly contracted by the Directors for the benefit of the road, could not, *except by consent of the Bond holders*, take precedence of the mortgage debt, and that it was the plain duty of the Court to enforce the right of creditors according to the priority of their liens."

**HEAVY VERDICT AGAINST THE PEORIA AND OQUAWKA RAIL ROAD COMPANY.**—In the case of Morgan vs. the Peoria and Oquawka Rail Road, which has occupied the United States District Court for a week past, the jury yesterday rendered a verdict of \$50,000 for the plaintiff. Morgan was a contractor on the road, and the suit was brought for the recovery of money alleged to be due him upon his contract. The counsel for the defence have moved for a new trial. The case was tried at the last session of the Court, and a verdict of \$47,000 rendered for the plaintiff, which verdict was set aside and a new trial ordered.—*Chicago Journal*, 17th.

**NORTH CAROLINA RAIL ROAD.**—By an exhibit to the Directors of this road, at their meeting in Raleigh on Friday last, it appears that the total amount received from passengers, freight and mail, for the months of July, August, September, and October, 1856, was one hundred and eight thousand three hundred and seven dollars and seventy cents; and from the same sources and for the same months in 1857, one hundred and thirty-one thousand and twenty-four dollars and seventy seven cents,—showing an increase of twenty two thousand seven hundred and seventeen dollars and seven cents over 1856.

#### PEOPLE'S BANK, LOUISVILLE.

A new bank, under the above name, is to go into operation in Louisville during the present month. The *Courier* says of it:

To the seven banks which have thus stood in our State amid the terror of the recent storm, another is now added. The People's Bank, which was chartered in 1855, with a capital of \$250,000, was advertised to go into operation on the 26th of last month. All the stock had been subscribed and the first and second installments, amounting to ten per cent., had been paid in specie. The third installment will be paid on the 10th of December, and the bank will then have \$50,000 of specie in her vaults. The entire stock has been taken up by Kentuckians. About \$100,000 of the shares are held by citizens of Louisville and the balance by citizens of the county of Warren, in which the bank is located and in the adjacent counties. Many of the stockholders are wealthy and their aggregate property is said to be valued at over three millions of dollars. By the provisions of the charter they are bound to the amount of their stock for all the liabilities of the bank, so that under any conceivable circumstances the People's Bank will be found good for the notes she may put in circulation—her stockholders, with property valued at over three millions, standing as security for \$250,000, or whatever the bank is liable for.

**BUFFALO BAYOU AND COLUMBUS RAILROAD TEXAS.**—The Houston *Telegraph* says of this road:

The B. B. & C. Railroad is apparently flourishing. Near thirty miles of the route is now graded beyond Richmond, leaving but about twenty more to grade to reach Columbus. The work is being pushed ahead with speed. The track laying has not yet been commenced beyond the Brazos, though the company expect to start that work next month. The business of the road is quite large, and indicates that it will find ample support from the freight and travel which naturally flow over it.

**COTTON.**—The number of bales of cotton received in Richmond, from the 14th of November to the 21st of November, inclusive, we take from the Reporter is as follows:

McMahan, McFarland & Co.	168
Robinson & Jenkins	221
A. Haber, Jr.	11
J. C. Shaw	85

**A NAUTICAL STATION.**—A correspondent of the London Times reports that the Austrian Government has just made a contract with an American company, for the construction of large floating docks at Pola, a port on the Adriatic about fifty miles south of Trieste, advantageously situated for a nautical station.

**THE CITY PASSENGER RAILWAY.**—The City Passenger Railway is almost completed. The rails are down on Sixth street and on Morris, and two parties of workmen, laboring towards the same point, were within a short distance of each other, yesterday.—*Philadelphia Inquirer*.

**COAL IN KANSAS.**—We were shown the other day, says the *Topeka Tribune*, a fine specimen of coal taken from the claim of Mr. J. H. Young, one and a half miles west of town. The vein is about two feet deep where it crops out, and has every indication of enlarging as it is worked.

There is also an abundant supply on the claim of Mr. Dow, two miles south of town, while on the Wakarusa, twelve miles south, there is an inexhaustible supply of coal of an excellent quality.

Several contracts have already been made for winter's supply of coal at twenty-five cents per bushel, and we are confident that with the employment of capital and the modern facilities for mining, which it is now demonstrated the supply will warrant, it will be afforded at a much less rate.

☞ The Orange and Alexandria (Va.) R. R. Company has resolved to reduce the salaries and compensation of its officers ten per cent.

☞ The gross earnings of the Wilmington and Weldon (N. C.) Rail Road, for the year ending Sept., 30, 1857, were \$494,508.56, and the cost of "operating proper" \$224,502.23, leaving \$270,006.42 as net earnings. During the year, \$65,173.42 was expended in filling up trestle work and in the purchase of additional engines and machinery.

☞ THE NAVY YARD.—At the present time, not more than a hundred men are employed at the Navy Yard, but a greater activity will soon be displayed in that quarter. The drawings for the new sloop of war were received on Wednesday from Washington by Commodore Stewart, and the work will be commenced forthwith.—*Pa. Inquirer*.

**I. C. A. L. RAIL ROAD.**—We learn that the plat showing the final location of the Iowa Central Air Line Rail Road has been received at the land office in this city. It is located along the valley of Maple Creek, through the town of Onowa, to the Missouri river. Said plat shows that a considerable amount of valuable land in Monona and Crawford Counties, heretofore withheld, are subject to pre-emption at \$1.25 per acre.



## MONETARY AND COMMERCIAL.

The financial news of the week contain nothing very startling or important. The month of December, always trying, on account of the preparations for the January settlements, the amount of means invested in the hog crop and the payment of taxes, is this year no less trying than ever. Capital, which does exist, is not seeking investment. Holders seem rather desirous to look out for safe and sure investments than to be in haste to put it out of their hands. Considerable has been invested in long loans of late at rates varying from 10 to 15 per cent. Twelve per cent is about a fair average of the mortgage loans recently made.

The discount houses are not enlarging their lines. There is but little prospect of them doing so till after the January settlements are fairly over. When these are out of the way we may look for a slight increase in the discounts of the regular houses. Outside rates range, as at our previous issue, from 15 to 24, and even 30 per cent. Ruinous as are these prices for money, many good houses have paid these shaves on small amounts and for short time.

Exchange on New York is 1 per cent. buying on 1½ per cent. selling rate for bankers' checks, and the demand not equal to the supply. This latter circumstance would indicate a still further reduction. If such should take place, it will probably create a paper credit again, and the country banks will put out their circulation.

Advices from New York do not look quite so encouraging as they have looked for the last two or three weeks. The news of the suspension of the Bank of England created some alarm, and there seems to be a disposition to wait for movements on the other side. The bank statement for the week is a satisfactory one. There has been an increase in loans, specie and circulation, and a decrease in deposits. The specie on hand amounts to \$26,069,832. This is nearly double the amount deemed necessary previous to the panic. The bank capital of the city amounts to \$64,663,000.

The stock movements are limited and show caution on the part of operators.

SALES AT THE NEW YORK STOCK BOARD—NOV. 30.

2,011 N. Y. State 6s, '73	109
10,000 N. Y. State 5s, '74	98
6,000 Michigan 6s	90
3,000 Ohio State 6s, '86	102
3,000 North Carolina State 6s	87
3,000 Tenn. State 6s, '90	84½
10,000 Illinois Central R. R. Bonds	84
3,000 Terre Haute and Alton 1st mort. Bonds	62
50 shares New York Central	73
20 " Pacific Mail St. Co.	69
34 " Del. & H. C. Company	104
65 " Cleveland & Toledo	43
109 " Chicago & Rock Island	72½
50 " LaCrosse & Milwaukee	113½
410 " Illinois Central	83
10 " Harlem R. stock	9
100 " Erie R. R.	163½
300 " Reading	51½
65 " Mich. Cent.	38½
300 " Mich. S. & N. Ind.	18½
50 " Panama	93
11 " Galena & Chicago	73½
100 " Milwaukee & Miss.	32

NEW YORK CENTRAL R. R.—The following is the statement of the earnings of the Central R. R. for the month of October, 1857, as compared with its earnings for the corresponding month of the previous year:

1857.....	\$651,441 97
1856.....	\$50,379 99
Decrease.....	\$298,938 02

## Reliable Books for Travelers.

## DINSMORE'S

## R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains Official Time Tables with References; Combined Railroad Routes; Steam Navigation; Gazetteer. Price 55 cents, with Large Map

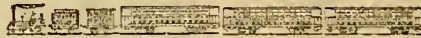
DINSMORE'S THIRTY MILES AROUND N. YORK, By Railroad, Steamboat, Stage, Express and Telegraph; or how to get in and out of the Metropolis. An alphabetical list of 1000 places. Price 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Funk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents. decltd  
DINSMORE & CO.,  
9 Spruce street, New York

## INDIANAPOLIS,

## Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.

INDIANAPOLIS AND CINCINNATI  
SHORT LINE RAILROAD  
VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

## THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Keosauha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Wanakena; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

## VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

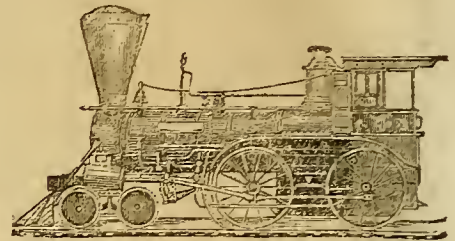
W. H. L. NOBLE, Gen'l Ticket Agent.

T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,

CINCINNATI, O.

APPLEGATE & CO.,  
Booksellers, Publishers, Stationers & Blank  
Book Manufacturers,  
43 Main St. Cincinnati, C.

CINCINNATI  
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

## BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,  
Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Ca Hand, and Signal Lanterns.

## Cotton Duck for Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

## Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seals. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

## Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

## ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers.

Cambridgeport, Mass.

## ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.

†oc6.

## GEO. D. WINCHELL &amp; BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

## SUCTION &amp; FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces Mills, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

ALFRED L. (The highest prize) awarded  
umps steam Pumping Engine at the lae da  
Ohio Mechanics' Institute. June 18, 1853 F1



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot' of Bonds.	Name of Company.	Quot' of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Net Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.		Albion, L. & H. p. r.	173		5,000,000.00				
498,800	6			1863-3	2d "		Androskog'n & Kennebec	51.55		1,400,000.00			209,475.46	110,236.98
190,000	7	July & Jan.			Domestic.		Atlanta and LaGrange	86.5		1,000,000.00	129,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646	7			now	"		B'gr, Old T. & Milford	12.5		135,000.00	52,046.20	39,104.40	8,671.61	15,000 in '53
500,000	0			1860	"		Boston & Worcester	44 5-8		4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m
500,000	7		N. Y.	1866	1st mortgage.		Buffalo & State Line			1,300,000.00				5 pr. ct. 6m.
300,000	7			1857-9-62	Inc'mc.		"							
200,000	7			1864	Domestic.		"							
577,187	6			1872	4th mortgage.		Central Ohio							
192,200	7			1874	1st mortgage.		Champlin & St. Lawrence	43		1,872,800.00	1,001,087.00	168,200.00	77,700.00	10 per ct.
280,000	7				2d "		"							
1,440,000	7				Domestic.		Ch'rltte & South Carolina	119		1,700,000.00	280,000.00	291,219.86	47 per ct.	\$72,300
1,300,000	6-7-8		N. Y.	8-9	1st mortgage.		Ch'go, Burling'n & Quincy	138		3,740,000.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
374,000	8			876	Convertible.		"							
1,300,000					1st mortgage.		Chicago, Fulton & Iowa							
532,000					2d "		Cin. Wilp'n & Zanesville	13 1/2		1,761,140.16	2,241,500.00	221,491.96		
104,000					3d "		"							
305,500					Income.		Cleveland Col. & Cin.	139		4,741,221		1 3 7/54	700,804	6 per cent.
540,000	0			1873	Convertible.		Cleveland & Mahoning	85		1,500,000.00				
43,000	7			1864	1st mortgage.		"							
400,000	7				2d "		Cumberland Valley	52		1,218,300.00		160,511.56	81,101.56	\$33,250.24
000,000	7			1873	"		Dayton & Cin. short line	52		1,000,000.00	1,000,000.00			
500,000	0			1857-8-9	1st mortgage.		Eastern Railroad	936-10		3,345,900.00		665,578.79	288,077.84	\$234,133
350,000	7				1st mortgage.		East Ten. & Virginia	120		625,450.00		30,897.30	19,692.30	
740,000	7			1869	1st "		Essex Railroad	20		700,000.00				
88,000	10			1861	2d "		Evansville & Crawf'd'vle	109		2,228,657.50		248,970.42	136,061.90	\$133,221.45
400,000	7			1861	1st "		The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,837.81	3 per cent.
200,000	10			1864	1st mortgage.		Fox River Valley	33		800,000.00				
100,000	6				1st mortgage.		Fair Haven Branch	15		300,000.00		50,381.23	14,822.45	\$166,240.00
100,000	6				1st "		Georgia RR & Banking Co.	233		4,156,000.00		1,068,202.54	357,689.42	\$166,240.00
300,000	6				1st "		Grt Falls & Conway R.R.	90				27,376.69	14,207.07	
4,000,000	6 1-9			1858	1st "		Grt West'n R.R. of Can.	281 1/2		4,191,550.00		2,068,836.00		8 pr. ct.
2,000,000	7			1869-70	1st "		Houston & Railroad	74		2,000,000.00		339,196.50	176,320.98	
1,842,000	7			1860	2d "		Hudson River	144		4,000,000.00		1,924,382.44	718,037.40	
12,885,000	7			1875	3d mortgage.		"	144		4,000,000.00				
4,115,000	7			1875	1st "		Illinois Central R. R.	704		18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.
3,000,000	7			1860	Freeland.		"	704		3,558,376.00				3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.		Indiana Central	72 1/4				354,871.00		
700,000	7	Jan. & July 1		1862	2d "		Iron R. R.	13		123,700.00				
50,000	7				1st mortgage.		Kentucky Cen. 2d Div.			719,500.00				
700,000	7				1st "		Knoxville & Kentucky							
218,000	7			1866	1st "		Laurens (S. C.) R. R.	32		166,000.00		22,233.59	14,233.59	
1,000,000	7			1875	1st "		Louisville & Nashville	184		300,000.00		50,234.71	14,149.13	\$8,000
1,000,000	6			1866	2d "		Lowell & Lawrence	12 3/5		2,697,090.00		587,236.57		10 pr. ct.
2,000,000	6			1875	1st "		Mad River & Lake Erie			2,697,090.00			162,277.50	
2,500,000	7			1868	1st "		Manchester & Lawrence	26		1,000,000.00				\$24,000
2,000,000	7			1874	1st "		Marietta & Cincinnati							
60,000	7 and 8			1867	1st "		"							
420,000	8				1st mortgage.		Mexican Gulf R. R.	27						
320,000	8			1881	1st "		Milwaukee & Horicon	30						
220,000	8			1868	1st "		Mineral Point R. R.	32						
6,000,000	6			1884	1st "		"	32						
500,000	7			1869	1st mortgage.		Mobile & Ohio	497		10,000,000.00		253,498.96	162,802.24	
8,356,000	7	May & Nov.	N. York		1st "		Nashua & Lowell R. R.	15		600,000.00		194,752.42	55,501.74	7 pr. ct.
32,892,000	6	June & Dec.	N. York	1864	Con. till 1859.		New Haven & Northm'tn	55		922,500.00				2 pr. ct. 6m
000,000	7			1873	1st mortgage.		New York Central	555		23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
926,000	7			1864	2d "		N. Y. & Harlem R. R.	173		6,717,100.00		1,040,493.26	64,678.71	\$37,692.30
411,700	7			1863	1st "		"							
500,000	7				1st "		N. Y. Prov. & Boston	50		1,58,000,000.00		245,713.00	51,544.40	
300,000	6				2d "		N. Lon., Wilim'tnu & Pal.	66		1,700,000.00		120,571.50		\$25,000
1,500,000	6			1873	1st mortgage.		Pontchartrain R. R.	5		500,000.00				
1,000,000	6			1873	2d "		N. O., Opelousa & Grt. West.			6,000,000.00		116,795.00	366,118.86	7 pr. ct.
2,000,000	6			1865	3d "		N. Y. & New Haven	02 1/2		3,000,000.00		1,007,666.48		
1,500,000	7			1859	1st mortgage.		North Western Va. R. R.	103 1/2						7 pr. ct.
3,000,000	5			1877	"		Northern (N. Y.) R. R.	118		2,000,000.00		600,000.00		
419,700	5			1860	"		North Missouri R. R.	19 1/2				25,176.74	88,458.56	2 1/2 pr. ct.
221,800	6				"		Norwich & Worcester R.R.	60		2,111,500.00		304,236.33		
400,000	6			1866	1st mortgage.		Ogd'nsh's, Clay'tn & Rome	94				289,690.10	137,875.93	5 pr. ct.
1,200,000	6			1876	2d mortgage.		Ontario, Simcoe & Huron	88 3/4		2,967,500.00		276,339.02		
300,000	8			1868	1st mortgage.		Orange & Alexandria R.R.							
300,000	7			1873	1st "		Peoria & Bureau Val. R. R.	47		1,500,000.00				6 pr. ct.
350,000	6			1861	1st mortgage.		Philadelphia & Trenton	28 1-5		1,000,000.00				
800,000	7			1864 to 1874	1st "		Portsmouth & Concord	47						
1,260,000	6			20 years.	1st mortgage.		Potsdam & Watertown	76		9,000,000.00				
					1st "		Rutland & Washington	62 1/2		2,000,000.00		68,525.42		
					1st "		St. Louis & Iron Mon. R.R.	86		6,000,000.00				
					1st mortgage.		Salem & St. Louis R. R.	16882		400,000.00			19,050.64	
500,000	6				1st "		Sand'sky, Mass'd & Newk	116				75,246.06		
250,000	6				2d "		Sullivan Railroad	26		500,000.00			17,378.08	
1317,000					1st mortgage.		Tennessee & Alabama	145				39,586.44		11m. 12pr. ct
					1st "		Terre Haute & Richmond	73		1,294,450.00				
300,000				1861	1st mortgage.		toledo, Wabash & Western	242		1,000,000.00				
198,000				1840	2d "		Troy & Boston							
262,500				1875	2d "		"							
2,500,000	7				1st, 2d, 3d "		Vicksburg & Jackson	46					165,076.04	
596,000	7				1st mortgage.		Virginia & Tennessee	215		3,000,000.00		322,048.60		2 pr. ct.
200,000	7				2d "		Westchester (Pa.) R. R.	31		165,000.00				
					2d "		Wilmington & Manchester	171						
					2d "		Winchester & Potomac	32						
					2d "		Worcester & Nashua	45 69.						



**GENERAL  
RAILWAY SUPPLY AGENCY.  
SNOOK & HILL'S PATENT  
LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas filters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap:3 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**

**Mechanical Engineer,**

AND

**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.

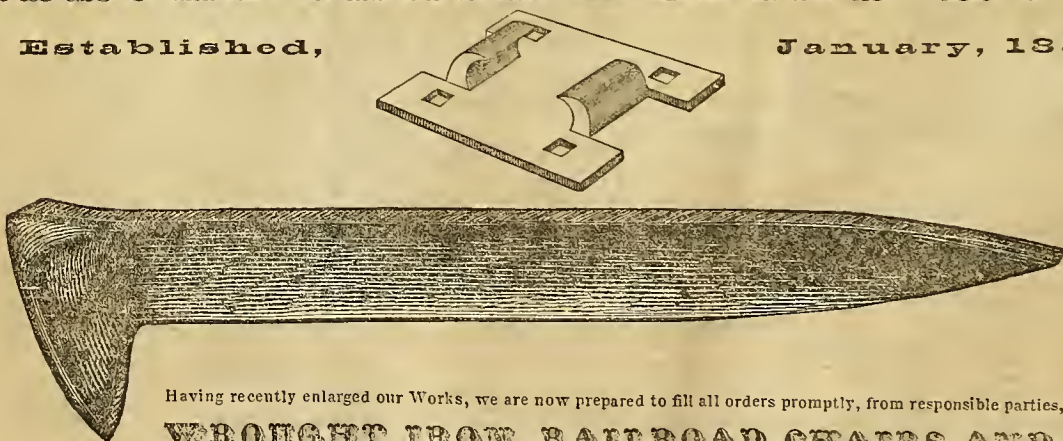
Entrance 5 Tryon Row.  
Applications for Letters Patent. Careful written  
Opinions of Inventors. Important aid in bringing out  
inventions. oc23

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an IMPROVED METHOD. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the bend where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. 1st: Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, as we can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.1y

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



# Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route.

#### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnett House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,  
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
Julio Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.

### Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:32 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,  
Supt Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR S.W. MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatched Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1857. November 9. 1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA

## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 8:30 P. M. Evening Express, through to Bellair and Pittsburgh without change of cars.

#### FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., or Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 4:40 P. M., for Springfield and Columbus.

This train also makes connections for Wilmington, Lancaster and Zanesville. This train stops at all points between Cincinnati, Springfield and Columbus.

FOURTH TRAIN.—Cleveland, Pittsburgh and Wheeling Night Express, leaves Cincinnati at 8:30 o'clock P. M., for all the Eastern cities.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

#### FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnett House; or at the Old Office, southeast corner Broadway and Front, opposite Spencer House; or at the Eastern Depot.

E. F. FULLER, General Ticket Agent.

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

FOR TICKETS apply at offices, No. 2 Burnett House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS, Acting Superintendent.

Om nibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Om nibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnett House, only.

W. S. BABCOCK, Ag't Cin. and St. Louis Om nibus L Office No. 2 Burnett House.

'an2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan8 ly 119 Walnut st., Odd Fellows' Buildin

1857. Summer Arrangement. 185

## Cincinnati, Hamilton & Dayton [TRUNK LINE.]

## RAILROAD,

FOR THE NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

### THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, ST. LOUIS, LAFAYETTE, LOGANSPORT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day.

Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connect- at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

### "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia, arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

### Only Night Train out of Cincinnati

### FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

#### RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

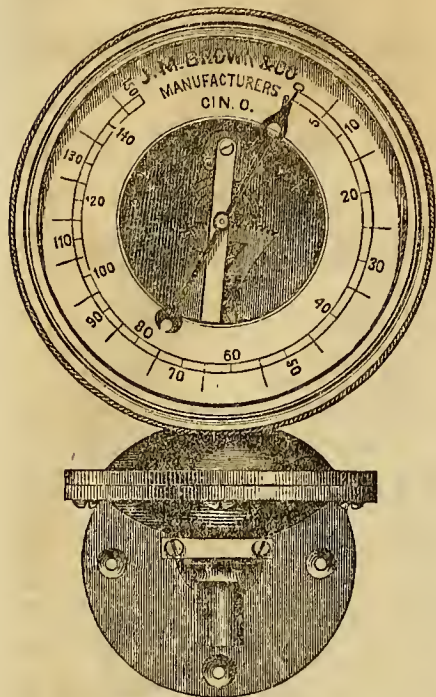
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR

### LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES  
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.  
N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

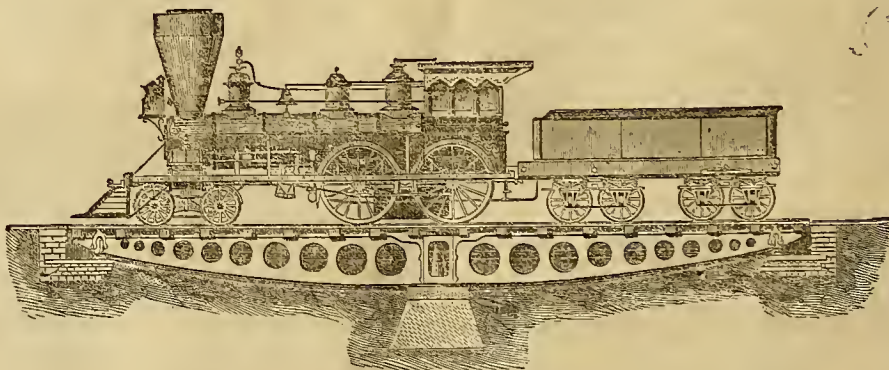
N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

# William Sellers & Co.

—LATE—

## BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING AND SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

### ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills, Built Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, Jr.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING.....DECEMBER 17, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
.. " " per month .....	3 00
.. " " six months .....	12 00
.. " " per annum .....	20 00
One column, single insertion .....	4 00
.. " " per month .....	10 00
.. " " six months .....	40 00
.. " " per annum .....	60 00
One page, single insertion .....	10 00
.. " " per month .....	25 00
.. " " six months .....	110 00
.. " " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—No. 42.

#### EDITORIAL.

An English View of American Speculation.....	649
President's Message.....	650

#### RAILROADS.

Illinois Southern Railroad.....	651
Railway Loans.....	653
Atlantic & Georgia R. R., Georgia.....	654
Trustees of R. R. in Vermont.....	655
Earnings of the P. Ft. W. & C. R. R.....	649

#### MISCELLANEOUS.

Public Domain of the United States.....	650
Railroad Bridge Drill, or Arrangements for the speedy erection of temporary bridges on R. R.— By Col. Frank Hewson, Civ. Eng.....	652
Wagon Roads to the Pacific.....	654

#### MONETARY AND STOCKS.

Monetary and Commercial.....	653
Sales at the New York Stock Board.....	653

#### EARNINGS OF THE P., Ft. W. & C. R. R.—

The earnings of the Pittsburgh, Ft. Wayne & Chicago R. R. Co. for the month of November last, were as follows, viz:

	1857	1856
From Freight .....	\$50,028 19	\$77,253 23
.. Passengers.....	72,973 72	68,198 07
.. Mail .....	4,482 29	3,470 03
.. Miscellaneous.....	167 79	275 85
Total .....	\$127,651 99	\$149,197 98

Decrease in Freight.....	\$27,225 14
.. " Miscellaneous .....	108 06
	\$27,333 20

Increase in Passengers.....	\$4,775 65
.. " Mail.....	1,011 06
	\$5,787 31

Total Decrease.....\$21,545 89

It will be observed that, although the revenue from Freight has responded to the general depression of trade; that from Passengers maintains a steady increase.

### AN ENGLISH VIEW OF AMERICAN SPECULATION.

HERAPATH'S JOURNAL, an excellent periodical (published in London) has some remarks headed "*American Gambling vs. English Honesty.*" We take no exception to this title (for there is gambling enough among us) but on a single point. This gambling is not against English honesty any more than honesty among all people. Nor is it true, that this gambling is exclusively American. On the contrary, it is a feature of all modern commerce. American traders are "fast" people, but the mode and principles of trade here are about the same as in England. The "Journal" forgets, that no "gambling" ever known exceeded that exhibited a few years since in the transactions of English Railroads. It forgets, that Europe is the school of America, and that we know no tricks we have not learned there. In fact, we have never yet arrived at such enormities of gambling, as were seen in the sale of South Sea stock, or Law's Mississippi scheme. Perhaps in some future day, we shall arrive at the dignity of such performances; but, as yet, we gamble on a far inferior scale. We readily admit however, that there has been an immense amount of commercial gambling, in the U. States during the last five years; and, that it is a fair subject of English criticism. The cause of English failures the *Journal* says, is owing to the inability of American houses to pay, which the *Journal* attributes to the course of the Banks in aiding speculation. To a certain extent, this is true; but as it is not wholly so, we shall offer a brief comment. The *Journal* says, "It is not from any reckless trading, on the part of our English merchants, as it was in 1847, but from the gross speculations in America, aided, or perhaps, one may say promoted, by the imprudent assistance of their banks. Had the American banks been reasonably cautious, or kept a proper margin in their advances, present disasters could not have happened, because the losses would have fallen on the speculators, and soon have brought them to a stand. But the folly, or greed of gain of the Banks, like our own in 1847, supplied people with the means of speculation far beyond their ability to sustain with any adverse change of circumstances."

The *Journal* proceeds to picture forth the speculators borrowing, extending their operations, and the Banks finally putting on the screw, and exploding the innocent and the guilty together. This picture is, as we remarked, true to a certain extent only. It is true that the Banks have loaned largely and entailed their discounts unwisely and inopportunist. But is this the whole truth? Is it the real, or the ultimate cause of commercial disaster? Was it Bank discounts which occasioned the Tulip mania, or the South Sea

bubble? The error of the Banks has been in *loaning on stocks or other securities*, instead of adhering strictly to the *discount of commercial paper*. In the latter case, they could not have loaned too much; because they would have followed only the *natural current of trade*; so that, the discounts being only of commercial paper, the sale of the property for which it is given would naturally and certainly pay the notes. But in the loan on stocks and securities is a permanent, *unavailable* loan unless those securities are saleable at a fair price, or the owners of them sacrificed. The Banks, threatened themselves by the public alarm, were obliged to enact these loans. The result was, they caused the failure of many persons who had invested too largely in these stocks, and finally, when that process could be carried on no longer, stop-payment themselves. Unquestionably this state of facts proves the Banks to have committed two gross errors; first, in departing from strictly commercial loans; and secondly, in being too sudden and rude in withdrawing those loans. So far, the Banks are censurable. But is not *Herapath's Journal* perfectly aware that if there were no Banks in existence these commercial revolutions must necessarily occur. The more we extend commerce, the more we extend debt; and it is absolutely certain that commercial disasters must follow commercial prosperity. The Banks, while they were most to blame as the holders of large masses of money, were nevertheless sharers in a common calamity. Let us take some practical examples, which lie before us. The following failures are reported with the following liabilities:

Ohio Life & Trust Co.....	\$7,000,000
John Farnam & Co.....	\$2,500,000
Lawrence, Stone & Co.....	\$1,800,000
Aggregate.....	\$11,300,000

Now in what way did Bank discounts occasion the failure of these concerns? The Ohio Life & Trust Co. and John Farnam & Co. were themselves loaners of money. Lawrence, Stone & Co. were dealers in manufacturing stock and agents of manufacturing companies. No doubt, they obtained large facilities from Banks, but the acceptances of manufacturing companies is a part of legitimate commercial business. In point of fact, what are called Bank discounts, or the withdrawal of them had nothing to do with the original and first failures in this recent crisis. On the other hand, it was such failures as these which occasioned the general alarm, pressing on the country and the Banks. The real cause was *too extended credits*, accumulating through a series of years of commercial prosperity. This is the simple fact. It has occurred in England repeatedly, and in America, and probably will continue during the life of commerce. There is not much use in making wry mouths over this affair. Commercial extension, commonly called prosper-



ity, is the object and device of all men engaged in trade. It comes with it, of course,—enlarged credit—and the continual hazard which attends credit. Suppose that American failures are the cause of English failures, and that American traders have gambled commercially: Is the English trader less to blame? Why does he trust gamblers? And why overlook the fact, that such debts are hazardous? Or why has he extended his credits so far that his own is in danger? It will be very easy to single out individuals, or firms, who have committed gross wrongs; but when we see a general commercial revulsion we may be assured it is not the fault of one man, or of one nation. It is incidental to all extended commerce.

#### PRESIDENT'S MESSAGE.

We make the following extract from the Message of the President of the United States to the National Legislature:—

"I recommend to Congress the establishment of a territorial government over Arizona, incorporating with it such portions of New Mexico as they may deem expedient. I need scarcely adduce arguments in support of this recommendation. We are bound to protect the lives and property of our citizens inhabiting Arizona, and these are now without efficient protection. Their present number is already considerable, and is rapidly increasing, notwithstanding the disadvantages under which they labor. Besides, the proposed Territory is believed to be rich in mineral and agricultural resources, especially in silver and copper.—The mails of the United States to California are now carried over it throughout the whole extent, and this route is known to be the nearest, and believed to be the best to the Pacific.

Long experience has deeply convinced me that a strict construction of the powers granted to Congress is the only true, as well as the only safe, theory of the constitution. Whilst this principle shall guide my public conduct, I consider it clear that under the war-making power Congress may appropriate money for the construction of a military road through the Territories of the United States, when this is absolutely necessary for the defence of any of the States against foreign invasion. The constitution has conferred upon Congress power to 'declare war,' 'to raise and support armies,' 'to provide and maintain a navy,' and to call for the militia 'to repel invasions.'—These high foreign powers necessarily involve important and responsible public duties, and among them there is none so sacred and so imperative as that of preserving our soil from the invasion of a foreign enemy. The constitution has therefore, left nothing on this point to construction, but expressly requires that "the United States shall protect each of them [the States] against invasion." Now, if a military road over our own Territories be indispensably necessary to enable us to meet and repel the invader, it follows as a necessary consequence not only that we possess the power, but it is our imperative duty to construct such a road. It would be an absurdity to invest a Government with unlimited power to make and conduct war, and at the same time deny to it the only means of reaching and defeating the enemy at the front-

tier. Without such a road it is quite evident that we cannot 'protect' California and our Pacific possessions 'against invasion.' We cannot by any other means transport men and munitions of war from the Atlantic States in sufficient time successfully to defend those remote and distant portions of the Republic.

Experience has proved that the routes across the Isthmus of Central America are at best but a very uncertain and unreliable mode of communication. But even if this were not the case, they would at once be closed against us in the event of war with a naval power so much stronger than our own, as to enable it to blockade the ports at either end of these routes. After all, therefore, we can only rely upon a military road through our own territories; and ever since the origin of the Government, Congress has been in the practice of appropriating money from the public treasury for the construction of such roads.

The difficulties and expense of constructing a military railroad to connect our Atlantic and Pacific States, have been greatly exaggerated. The distance on the Arizona route near the 32d parallel of north latitude, between the western boundary of Texas on the Rio Grande and the eastern boundary of California on the Colorado, from the best explorations now within our knowledge, does not exceed four hundred and seventy miles, and the face of the country is, in the main, favorable. For obvious reasons the government ought not to undertake the work itself by means of its own agents. This ought to be committed to other agencies, which Congress might assist either by grants of land or money, or both, upon such terms and conditions as they may deem most beneficial for the country. Provision might thus be made not only for the safe, rapid, and economical transportation of troops and munitions of war, but also of the public mails. The commercial interests of the whole country, both East and West, would be greatly promoted by such a road; and, above all, it would be a powerful additional bond of union. And although advantages of this kind, whether postal, commercial, or political, cannot confer constitutional power, yet they may furnish auxiliary arguments in favor of expediting a work which in my judgment, is clearly embraced within the war-making power.

For these reasons I commend to the friendly consideration of Congress the subject of the Pacific railroad, without finally committing myself to any particular route."

President Buchanan in the above remarks takes the natural and strongest ground that a sound statesman can adopt. In his recommendation to establish a territorial government over Arizona, he simply recommends Congress to take the most simple and efficacious measures to reclaim from its present wilderness state a region of country which is capable of a wonderful mineral development; one which will tend to supply some, at least, of the increasing wants of commerce, consequent upon the rapid developments of the agricultural, manufacturing, and commercial resources of our country. Arizona will be emphatically a *silver state* as California is now a *gold State*. As such, it is the true policy of our Government to provide for its only development.

In regard to the Pacific R. R., the Presi-

dent takes exactly the grounds that this journal has always advocated.

Our country, as now constituted, consists of two great countries, the States of the Atlantic, and the State and Territories of the Pacific coasts. These States are now separated by a vast wilderness, occupied by savages, and destitute of the facilities of intercourse. Our only means of intercourse is by long and tedious ocean voyages, and a transit over the domains of a foreign power. Such a state of things is as unsafe in time of war as it is disgraceful in time of peace. We should have a Pacific Railroad, and that, too, as soon as it can be built; and we should have it first constructed on the shortest and most practicable route. It should be constructed on a route which can be operated at all seasons. And as a means of its construction, the Federal Government should grant its aid to private enterprise.

We trust that the National Legislature will in its wisdom, provide some adequate means for the construction of this great highway.

#### Public Domain of the United States.

The public domain of the United States, according to the Report of the Secretary of the Interior, embraces an area of 1,450,000,000 acres. It stretches across the continent and embraces every variety of climate, soil, and resources, both agricultural and mineral. It was acquired, first, by the voluntary cessions of several of the original thirteen States; then by the Louisiana purchase obtained from Napoleon by the treaty of 1803. The next enlargement of our territory was effected by the treaty of 1819 with Spain, ceding the Floridas to the United States; then its further extension was effected by the treaty of 1848, at Guadalupe Hidalgo, with Mexico, ceding New Mexico and California. Subsequently Texas accepted the proposition of this government establishing her boundaries for the "relinquishment by the said State of all territory claimed by her exterior to said boundaries." The last cession to the public domain is that, in 1854, from Mexico known as the "Gadsden purchase," covering a surface of 23,161,000 acres south of the Gila river,

#### LAND RECEIPTS.

During the fiscal year ending June 30, 1857, and the quarter ending September 30, 1857, public lands have been surveyed and reported to the extent of.....	22,839,461 00 acres
During the same period.....	21,160,037 27 "
have been disposed of as follows:	
For cash.....	5,300,550 31 acres.
Located with military warrants.....	7,381,010 00 "
Returned under swamp land grant.....	3,362,475 96 "
Estimated quantity of railroad grants of March, 1857.....	5,116,000 00 "

The amount of money received on cash sales is \$4,225,908.18.

This shows a falling off in land receipts from those for the corresponding period of the preceding year of \$5,322,145.99. With a falling off during the same period, in the location of lands, with warrants, of more than 20 per cent!



## Railroads.

### ILLINOIS SOUTHERN R. R.

We are in receipt of the Report of the Engineer of this Company, Cyrus Jennings, Esq., on the preliminary survey of the Road, and estimates for constructing. The following is a general description of the route:

"In obedience to the order of the President, I established the 'Initial point' near the Marine Railway buildings in Mound City, from which point the line takes a north-easterly direction, almost parallel with the Ohio river, crossing Hess' Bayou near its mouth, and passing about three-fourths of a mile west of the old town of America, and *via* Wm. Hughes' into the valley of Olmstead's creek. Following the general direction of this valley, we pass some half mile west of Caledonia, crossing the divide between the waters, which flow directly into the Ohio river on the south, and those which seek the same outlet by the tortuous course of Cache river on the north-west, at Wm. Harvison's. The line to this point is exceedingly favorable, as regards alignment grades, cost of construction and maintainance; but approaching to, or departing from this summit, we have to use a grade of 45 feet per mile, with a cut of some 35 feet.

From Harvison's summit, the line continues down a small tributary of Cache, leaving Lawrence pond on the west; and Swan pond on the east, to the crossing of Cache at the narrowest place in the 'Scatters,' on to the lower end of Horse Island, and up the high part of the Island to the second crossing of Cache, near Indian point; thence up the valley of Dutchman creek to a point one mile south of Vienna, where the Vienna and Johnson's creek routes diverge. The Vienna line crosses the dividing ridge between Dutchman and Town creeks, about half a mile south of Vienna, with a cut of 60 feet and 55 feet grades, into the valley of Town creek, crossing that creek just above the upper bridge, thence up Town creek to McFatriddle's branch, and up the east fork of that creek to the divide between Max creek and Town creek, near Lewis Sidmon's, with a cut of 23 feet and 55 feet grades; thence down a branch of Max creek to the crossing of the Main creek, about half a mile above the crossing of the Vienna and Shawneetown road; thence up another branch of Max creek and through the divide between Cedar creek and Max creek, with a cut of 36 feet and 55 feet grades; thence on a course N. 46° E., leaving Esq. Barnwell's on the west, to the crossing of Cedar creek, near the old Kuykendall place; thence up a branch of Cedar creek, passing near the old Tanyard, to the summit of the 'Grand Chain,' dividing the waters of Little Saline on the north, and Cache and Big Bay on the south, near the Mount Zion meeting

house; making a cut on the summit of 45 feet with 65 feet grades. From the summit of the Grand Chain the line continues down a tributary of the Little Saline, known as Newton's Fork, to the crossing of Little Saline near George Joiner's; thence up a small branch to the divide between Little Saline and Pond creek, near Grace's Store, making a cut of 32 feet with 65 feet grades; thence on a course N. 15° E., leaving Oscar Purnell and John Hancock's on the east, to the crossing of Big Saline at the mouth of Little Saline. Thence on a course nearly N. 27° E., to Harrisburg, passing through the old Mitchell place near the Graveyard, and leaving Cook's store and James Pierson's on the east. Two lines were run at Harrisburg; diverging near Edward Hampton's, the western line passes a little to the east of John Holland and Lewis Dorris, to the west side of Harrisburg; passing through the farm of James Feagle, to the west of his dwelling, it continues on a course N. 30° E. to the crossing of the middle fork of Saline, about half a mile above Robertson's ford. The eastern line passes on the east of the high ground at Perkiu's house, leaving Harrisburg about three hundred yards to the west and north and continues on a course nearly N. 10° E. to the crossing of the middle fork, a short distance below the Western line, and joining the west line on Sheppard's farm. From the middle fork of Saline the line continues on a course nearly N. 37° E., passing to the west of Haley and to the East of Judge Elders, through the farms of Wiley Pinnell, Josiah Dooley, James Carder, Larkin Stallions, Robt. Wilson and Jonathan Davis, to the crossing of the north fork of Saline at Stone's ford. Thence on a course N. 32° E. through the divide between the north fork and Bear creek, up Bear creek to Indian creek, passing Col. Powell on the east, to the Ditney ridge, or the divide between Bear creek and Lick creek. From the Ditney ridge the course is N. 32½° E. nearly to Carmi; passing through the farms of Asa Martin, James Renwick, John Martin, J. B. Thomas, N. Young and Nathan Shipley, to the west side of Carmi. Passing the Academy on the west, it crosses the Little Wabash about half way between the Flouring mill and the bridge.

From Carmi the course is N 56° E. to the 'bend of the river;' thence N. 34° E. nearly to Grayville; passing through the farms of Richard Matteson, Adam Mogler, Jesse Chery, Wm. Cross, J. C. Bean and Samuel Potter. Two lines were run at Grayville, diverging near the north-east corner of Section 6, T. 2, R. 11, the Western line passes through the farms and near to the dwellings of John Butler and Mr. Charles, and leaving John Rigal's house on the west, enter Grayville nearly in the centre of Washington street. The Eastern line runs on a course nearly N. 31° E. to

the point of the hill below, south of Mrs. Webb's, and follows the bluff up to Grayville, keeping just above high water in the Wabash, and making a junction with the Western line in Washington street.

From Grayville the line follows the high ground bordering the overflowed bottom, between Bonpass and the Wabash, to the crossing of Bonpass near L. M. Graham's, cutting through a high ridge on the south side of the stream. From the crossing of Bonpass the course is N. 34° E. for about 15 miles, passing through the farms of Mrs. Vincent, Jos. Compton, Geo. Schaffer, Edward Beard, J. Molcher, Robt. Chapman, David Reel, Wm. Breston. Robt. Leek, Dr. Fudge and William, Collinson, to the crossing of Raccoon creek about a mile and a half below the bridge on the Mount Carmel and Lawrenceville road. Thence N. 15° E. to the crossing of Embarras river at Brown's Mill; passing through the farms of Alexander Valle, Henry Goodhart, Frank Fugaw and William Lawson, and leaving St. Francisville about one and a half miles to the east. From the crossing of Embarras the course is nearly N. 59° E. through the overflowed bottom, between the Embarras and Wabash rivers, to the junction of the Ohio and Mississippi and Wabash Valley Railroads, one mile west of Vincennes.

As the route passes through a section of country with every variety of topographical feature, there is necessarily a great variety of character of the work of graduation; some of it being unusually favorable and cheap, while other sections are quite difficult and expensive. In the counties of Pulaski, Saline, Gallatin, White, Wabash and Lawrence, the road may be said to be on a bottom location; the ground being generally level, and the line for much of the distance in the vicinity of streams; which, being subject to the usual overflows, add somewhat to the cost of construction, making it exceed, what might be expected from the general character of the country. In the counties of Johnson and Pope, the character of the work is entirely different from the first mentioned counties being cut up by high ridges and deep valleys, heavy cuts and fills are encountered both of earth and rock, and requiring heavy grades (65 feet) to pass over the summits,—but, with the advantage of not requiring sharp curvature. These counties will also require a large proportion of masonry, to pass the water of the numerous valleys, which it is necessary to cross, though none of a very expensive character. No heavy bridging will be necessary; the longest span not being over 300 feet; but there will be a considerable number, varying from 30 to 150 feet span, and some small open bridges.

Although the work of graduation is quite heavy in some counties, it will be seen by reference to the detailed estimates, that the average in several others is quite low, so that



the average cost per mile of the whole road will fall considerably below that of most roads in the State.

By reference to the table of grades and curves, it will be seen that the road will be well adapted for high rates of speed as well as economy in the operation; there being but a small per centage of heavy grades or sharp curvature, and of that a very large per cent. is straight.

The cost of repairs and maintainances will probably be considerably less, than is usual on western roads, as the material for the road bed is generally good, and a large proportion of the route being in a level country, it will not be subject to the action of swift running water, to which cause some of the heaviest items of repairs are often chargeable.

The superstructure estimated for is a T rail weighing 68 pounds to the yard, 21 feet long. The rails to be laid on Morley's patent chair, which I have no hesitation in recommending as the best chair yet invented. These chairs can be manufactured at the extensive works of Mr. Jas. Goodloe in Mound City, at a cost, (future economy considered,) that will compare favorably with the common wrought iron chair. The iron to be laid on cross-ties 7 by 8,  $8\frac{1}{2}$  feet long, placed two feet apart from center to center, and the road bed covered with sand and gravel. In this connection I would respectfully recommend to you the adoption of the 'Broad (6 ft.) Gauge,' for the reasons, that your most important northern connection, that with Ohio and Mississippi, is a broad gauge, as yours will be a prominent passenger road, and this is a deservedly popular gauge with travelers, it will prove an additional attraction, and will at once establish the road as a favorite thoroughfare. A natural and artificial break occurs at your southern terminus by the intervention of the Ohio and Mississippi rivers; and the difference of gauge on the southern and northern roads, the former being generally, 5 foot gauge, and the latter, what is known as the narrow, or 4 feet  $8\frac{1}{2}$  inch gauge. The last reason I will mention is, that should the business from your narrow gauge connections eventually require it, a third rail might be laid at a trifling cost, and thus perfect every connection. The width of embankment increases (according to height, and quality of material,) from 12 to 18 feet, excavation 20 feet wide at grade. The masonry computed for is substantial, but without show or ornament, plain, solid rock or weather brick. The Bridges used according to the estimates will be plain, substantial wooden structures. For spans exceeding 50 feet in length, Howe's truss bridge will be used."

The estimates of cost of construction inclusive of iron foot up as follows:

	Per Mile.	Total cost.
Pulaski County.....	\$10,954 05	\$212,070 54
Johnson ".....	15,068 82	350,802 17
Pope ".....	48,248 65	255,752 87

Saline ".....	5,823 21	152,020 38
Gallatin ".....	16,129 09	44,335 01
White ".....	7,025 80	221,064 12
Edwards ".....	23,252 10	90,919 63
Wabash ".....	5,526 11	130,305 73
Lawrence ".....	9,155 63	115,242 79
Total.....	\$10,604 73	\$1,575,132 24

#### ESTIMATE FOR SUPERSTRUCTURE.

12,690 $\frac{1}{2}$ Tons of Iron Rails delivered at.....	\$ 60 00	\$761,800 00
78,000—(965 tons) Cast Chairs delivered.....	04	86,553 00
750,000 lbs. Spikes delivered.....	07	52,500 00
24 Switches and fixtures delivered.....	60 03	1,440 00
Distributing Iron, Chairs and Spikes, per mile.....	250 00	37,500 00
150 miles Track Laying per mile ..	450 00	67,500 00
Superstructure per mile.....	\$6,715 28	\$1,007,293 00

#### SUMMARY.

	Per Mile.	Total.
Graduation, Masonry and Bridging, and Cross Ties.....	\$10,604 73	\$1,575,132 24
Superstructure.....	0 715 28	1,007,293 00
Rolling Stock.....	1,546 23	225,980 40
Station Buildings.....		31,000 00
Right of Way for Depots, &c....		5,000 00
Total Cost.....	\$19,149 15	\$2,844,606 24

#### ESTIMATES OF BUSINESS.

We have not space to give the detailed estimates of business as given by Mr. Jennings. The business to be done by this road will be derived from the natural intercourse between the valley of the Ohio and the South West. The following is the summary of the estimates:

75,000 through passengers.....	\$337,500 00
150,000 tons through freight.....	300,000 00
31,300 way passengers, traveling half the length of road.....	70,425 00
100,000 tons way freight, carried half the length of road.....	100,000 00
Mails and Expresses.....	25,000 00
Total receipts.....	\$832,925 00
Deduct 50 per cent, for expenses.....	416,462 50
Nett profits.....	\$416,462 50
Total cost of road.....	\$2,844,606 24

Equal to 14 $\frac{3}{4}$  per cent. (nearly). The road, if economically and judiciously managed, can be built for my estimate, and will pay not less than 15 per cent. on the capital."

In conclusion Mr. Jennings says:

"In conclusion, gentlemen, permit me to congratulate you upon the flattering prospects of your road, and at the same time remind you, that you are engaged in an enterprise, which requires skill, energy, perseverance, unanimity and concert of action to perfect; practice those principles, and success will crown your efforts, and you will have the proud satisfaction of transmitting to posterity a work, which will entitle you to their grateful remembrance.

On the 17th inst. contracts were closed with the following persons for the graduation, masonry and bridging of nearly twenty miles of this road, commencing at Grayville on the Wabash, running south:

To Gardner & Snodgrass, of Pa., Sections 114, 115, 116, 117.

To P. D. Barrett, of Kentucky, Section 113.

To J. W. Goodwin & Co., of St. Louis, Sections 110, 111, 112.

To C. H. Bliss & Co., Miss., Sections 107, 108, 109.

To Charles & Doyle, of Ill., Sections 105, 106.

To Clarke & Harrington, of Ky., Sections 102, 103, 104.

All this work is to be completed by January 1st, 1859. The Contractors are making active preparations for the vigorous prosecution of the work. The location of the road is progressing, and the Company confidently expect to be able to place at least 75 or 80 miles more of the line under contract before the first of February next.

[For the Journal of the Franklin Institute.]

#### RAILROAD BRIDGE DRILL, OR ARRANGEMENTS FOR THE SPEEDY ERECTION OF TEMPORARY BRIDGES ON RAILROADS.

BY COL. FRANK. HEWSON, CIV. ENG.

(Reported from personal inspection by Ellwood Morris, Civ. Eng.)

The Reporter having lately witnessed one of Col. Hewson's "Bridge Drills" at Mount Carbon, Schuylkill Co., Pa., requested of him explanatory sketches, and description of these interesting maneuvers, which we now have the pleasure of laying before the readers of the *Journal*.

The general use of timber bridges upon the American railroads, is attended with great inconvenience and loss upon railways of heavy trade, when such bridges are suddenly destroyed by fire or flood, as sometimes happens; and perhaps the more frequently from the former upon roads transacting the largest business.

To have at hand the means of speedily repairing such disasters, by double track temporary bridges of adequate strength to carry the heaviest locomotives, it is often a matter of great consequence, especially to railroads doing a heavy mineral business, on which the sudden destruction of a bridge may disorganize the entire trade in all its extensive ramifications, by land and water, from the mines even to the distant consumer.

The business of a great mineral railroad sometimes exceeds \$12,000 a day, or \$500 an hour, on such works, the value of time is immense, and the necessity of restoring with dispatch, the continuity of the line in the case of an accidental break, is correspondingly great.

This has led the superintending engineers in charge of such works, to consider closely the best means of speedily restoring the track, when broken by the destruction of a bridge.

In 1850, Col. Hewson had to replace by a substantial trestling, a bridge of about 150 feet span over a chasm 30 feet deep, upon a double track railway; and though he conducted the repair with characteristic energy, it required 72 hours of time, 1562 days work of men, and an outlay of \$3,873, to restore the double track over the Schuylkill River at Mount Carbon, (the place referred to,) where the bridge was suddenly swept away by a tremendous flood.

Upon four occasions in Col. Hewson's professional experience, he had occasion to notice that the great expense and loss of time in restoring a broken communication over a river, with a double track railway, was caused:

1. By the difficulty of collecting the neces-



sary force, timber, and other materials, and despatching the same to the scene of disaster.

2. By the enormous prices which had to be paid for lumber, &c., in consequence of the sudden and peremptory demand.

3. By the want of adequately skilled labor, and the confusion incident to the necessary employment of large bodies of inexperienced men, at high rates of wages.

4. By the want of proper appliances for loading, conveying, unloading, framing, and raising the trestle bridges, at the site of the break.

To remedy these evils, as far as practicable, he was led to provide a *magazine* of all of the necessary materials, in a position to admit of being promptly loaded on a railroad train, and to project and organize a system of "*Bridge Drill*," (the subject of the present paper.) under which, a body of sixty men of the permanent roadway force assembled at one point—at the *magazine of materials in fact*—under the direction of the master carpenter of the road, were enough with the assistance of a locomotive train, to load, convey to the scene of action, and erect in a few hours, a substantial trestle bridge, in place of any of the regular railroad bridges, lost by fire or flood.

Col. Hewson has prepared at the carpenter shop of the roadway department of the Upper Schuylkill railroads, above Pottsville, all the materials of wood and iron, all the cross-ties, rails, spikes, &c., all the stone for crib abutments, and other things necessary to form a double track trestle bridge 150 feet long, over a chasm 30 feet deep, of adequate strength to carry the heaviest locomotives and coal trains moving upon it, in opposite directions at the same moment, on the two tracks.

The bulk of the materials are piled over a side track upon cross-beams, elevated so as to allow a train of eight-wheel trucks to be backed under them, forming ten piles of an aggregate length of 342 feet.

In the vicinity of these piles, with a railroad track along its front (to facilitate loading), is a building called the "*equipment house*," where there are stored for use, in a systematic manner, the hoisting machinery, levers, ropes, tackle blocks, bolts, spikes, washers, chairs, gauge bars, and all the tools and implements which experience has shown to be necessary for the erection of double track trestle bridges for railways over rivers—the number and quantities of these necessities are fully developed by the "*drills*," and this is one of the advantages of periodic drills; another is, that it enables a small body of men drawn from the ordinary roadway force, by being accustomed to act together, and drilled to particular duties, to perform a great amount of labor, and to restore a destroyed bridge with uncommon despatch.

The operations we are describing, commence with the assemblage of 60 men at the *magazine* of materials, under the lead of the master carpenter, and the arrival of a heavy locomotive engine with a train of 15 eight-wheeled trucks, or flats—two of these are placed in front of the "*equipment house*" to receive the hoisting gin, and the small materials, while the other thirteen trucks are backed by the engine, under the piles of bridge materials.

In the event of the abutments of a bridge being swept away, as well as the bridge itself, temporary abutments are erected of crib work, filled with stone. The timber and rag bolts for this work form part of the *magazine* of materials, and the stone is on hand also in self-

discharging bins at a proper elevation above the track.

Every thing necessary, in short, is provided and arranged beforehand, and it only remains to supply the manual labor to put the parts together, and the locomotive power requisite for transportation.

#### DETAILS OF THE LOADING MANEUVERS.

There are 10 sections or piles of timber and materials whose aggregate weight amounts to 94 tons (of 2240 lbs). The weight of heaviest section=13½ tons.

Each section, except No. 3, has two bearers, 4 moveable blocks, 4 standards, and 4 levers. Section 3 requires 3 bearers, 6 moveable blocks, 6 standards, and 6 levers.

The force employed at the loading maneuver=48 men placed at the outset in the following positions:—7 men to each lever, and one man to each block on section No. 1.

7 men to the intermediate lever, and one man to the corresponding block on the right, and left flank of section No. 3.

The train of empty eight-wheeled trucks being backed under the suspended piles from 1 to 10. The foreman takes position on top of section No. 1, and gives the following command: *Section, are you ready? Bowse! Draw blocks! Plumb up! Draw levers! Forward!* Same process repeated at ensuing sections.

After section No. 3 is loaded, the intermediate lever men led by their block tenders, drag out the bearers which have fallen upon the tracks, by the aid of short ropes armed with hooks, which they attach to iron staples at the end of the bearers.

Time occupied in loading the 10 piles is 3 minutes. Their weight is 94 tons, as above stated; while this is in progress, six men load the gin and tools from the equipment house. The locomotive train now loaded, with all the materials necessary for the erection of the temporary bridge, proceeds to its destination.

#### UNLOADING AND FRAMING MANEUVERS.

Two active men remain upon the trucks to unload—the framers and timber carriers are drawn up at the foot of the embankment, beyond the reach of the falling timbers, in two files about ten paces apart, in right and left open order, facing inwards.

The timber and apparatus being unloaded in the following routine:

1st. The float and boat poles are seized by a gang of 12 men and launched upon the water, with a party to take soundings. The balance of the men remaining as they were, until the timbers and plank are unloaded. The planking on which the trestles are framed and launched, are seized and laid down on the ground leading to the water's edge—then the mud sill of trestle placed within three feet of the water—then the uprights or posts and cap pieces which are put together and launched.

12 men are employed in carrying the timbers composing the trestle—8 men frame them together; these two forces also launch the trestle and 3 men float it to the hoisting gin.

#### GIN MANEUVERS AT THE ABUTMENT AND IN RAISING THE TEMPORARY BRIDGE.

After the gin is launched from the cars, the following commands give the order of its movements:—

1st. "Lock levers!" (done by throwing rollers in gear.)

2d. "Forward!"

3d. "Halt!"

4th. "Spring levers!" (by throwing rollers out of gear.)

5th. "Secure purchase spar!" (lashing down the rear end of the purchase spar to the track sills, or some other suitable object.)

6th. "Overhaul tackle and attach trestle!"

7th. "Bowse on the fall!"

When the trestle is erected in its position, the following orders are given:

1st. "Secure trestle!" (spiking down stays of three by ten inch plank, leading from abutment to cap piece to keep the trestle from falling.)

2d. "Adjust skids for gin!"

3d. "Detach purchase spar!" (unlashing the fastenings at its rear end.)

6 men work the gin, who also put down the stays, adjust the skids, and lash and unlash the purchase spar.

20 men haul upon the fall.

When the three first trestles have been erected, organized parties follow the wake of the gin with the bolsters and rail-joists. 4 men fit down the bolsters, and 8 men deliver and lay down the rail-joists.

The bolsters are carried with the rail-joists on timber carts, which are run upon three-inch plank, extending from trestle to trestle.

8 men follow the rail-joists with the track-laying.

Time unloading, framing, launching, and erecting 3 trestles, ..... 28 min.

Time laying down the rail-joists and tracks, .... 20 "

Total time of completing one-fourth, of 150 feet span with the tracks laid, 54 men employed, 48 min.

This is the time actually occupied in the drills for exercising the men.

At the same rate as above, the double track railway communication over a chasm 150 feet wide, and 30 feet deep, would be restored in 192 minutes—but, to cover all contingencies, we will say *six hours*.

To restore, by means of the preparation, and the drill, in six hours, with 60 men, a broken communication, which has been ascertained on another occasion, to have required 1500 days' work of men, and 72 hours of time, is certainly an important achievement, one that deserves the attention of railroad men, and which must redound to the credit of Col. Hewson, the engineer who devised this "*Railroad Bridge Drill*."

#### RAILWAY LOANS.

The ancient Egyptians, who imparted knowledge and instruction to the Greeks and Romans, and through them to all modern nations, are said to have established a stringent regulation to discourage the borrowing of money. The borrower was required to give in pledge the body of his father, which it was the custom to have embalmed in a remarkable manner, and he was not only deprived of funeral rites if he failed to redeem it, but whilst he lived he was not permitted to bury any person descended from him.

It will be allowed on all sides that this Egyptian regulation is perfectly foreign to us; that however much in other respects we may have profited by Egyptian manners, customs, and knowledge, we have not imbibed their prejudices against money borrowing. Scarcely a shopkeeper or other trader, large or small, carries on business without borrowing, and most land owners are borrowers. If every one in England used only his own means in trading and acquiring property, or if great restrictions were imposed on borrowing, we should soon expire as a nation of shopkeepers; our position would not long be that of the first commercial people in the world.



Borrowing money forms one of our principal business transactions, in which individuals, firms, associations, and corporations are all more or less actively engaged. Our banking system, which has grown to so great an extent, is nothing more in the main part than one of borrowing and lending, the banks inducing capitalists to lend to them money at "call" at high rates of interest, which they re-lend out in the shape of discounting bills, &c., at higher rates of interest. By means of borrowing and lending, capital is employed to the best advantage as respects benefit to private individuals and the public at large. If it were not for this system we should have money hoarded, hid in mud banks, instead of being deposited with the banks, where good security is given, and by means of which it is kept in active circulation for the benefit of the public at large.

Amongst public borrowers are railway Companies, and perhaps there are no bodies, not even Government itself, which make better use of the money, and which afford greater security for the due payment of the principal and interest. Companies owning the railways of the United Kingdom have spent 300,000,000 of money in making and furnishing 8,500 miles of railway, and of this 300,000,000, 75,000,000 are borrowed. The exact figures, according to the latest Government account, are £297,583,284 spent, of which there is borrowed £75,161,241.

The average rate of interest given on the borrowed 75 millions is 4.35 per cent. per annum, which amounts in a year to £3,285,475, the profits of the railways being about £12,000,000 per annum, so that the loan interest being the first charge on the profits, abundant security is given for the payment of the interest on the 75 millions borrowed.

In fact, nothing can be more secure than loans to railway Companies. In general the profits applicable in the first place to paying the interest, are three or four times greater than the amount of loan interest, and those profits are derived from the public traffic of the kingdom, which increases every year, while the railway Companies have borrowed about as much as they require. The experience of centuries proves that the public traffic of the country is a lasting and an improving business. The land on which railways are formed is not more firm than the traffic of the kingdom is durable, and as the railway system in this country is not yet quite complete, railway traffic may be regarded as being in its infancy. It is well known and ascertained that the traffic on our railways advances year after year at a great rate; and according to the best estimates that can be formed, but a fraction of the goods traffic of the kingdom is now carried by the railways. The facilities for traffic in goods and passengers afforded by railways, combined with their unrivalled power, speed, and safety, will ensure great increase in their revenue, and thus provide an additional cover for the loan interest.

For the public welfare, to what more useful and beneficial purpose could the 75 millions borrowed be applied than the construction of railways? Every million spent in making a railway is worth 20 millions at least to the public.

Considerable inconvenience and expense are now suffered by borrowing and re-borrowing these loans in small sums for limited periods. They are borrowed in sums varying from £500 to £5,000 each, for 2, 3, 5, or 7 years. The consequence is that a large rail-

way Company is always in the market for loans, and a continual expense is kept up. Mr. Glyn, the eminent banker and Director of the London and North Western Company, invented a plan to get rid of this trouble and expense by capitalizing the loans, rendering them permanent, their interest fixed, but their position in point of security the same. Thus capitalized, they will be called debenture stock. Most railway Companies have procured acts enabling them to convert loans into debenture stock not exceeding 3½ or 4 per cent. interest. When the 75 millions are so converted, the railway Companies will gain considerably in interest and expenses. That can only be effected, however, in good times, when money is very cheap, and when lenders will be only too glad to convert into perpetual 3½ per cent. debenture stock, or the public will readily accept it at par, which will provide the Companies with the 75 millions to pay off the money lenders, if they will not themselves accept the debenture stock in lieu of their loans. The conversion will require years for completion. Already some Companies have effected it to a small extent.—*Herapath's Journal*.

#### WAGON ROADS TO THE PACIFIC.

The Report of the Secretary of the Interior has the following notice of the wagon roads to the Pacific authorised by last Congress.

By an act of the last Congress, this department was charged with the construction of the following wagon roads: one from Fort Kearney, Nebraska, by way of the South Pass, to the eastern boundary of California, near Honey Lake; one from El Paso on the Rio Grande, to Fort Yuma, at the mouth of the Gila river, and one from the Platte river, via the Omaha reserve and Dacotah city, to the Running Water river.

Provision had been previously made for opening a road from Fort Ridgely, Minnesota, to the South Pass, and operations had been commenced thereon, under instructions from my predecessor.

Work has been commenced on all these roads, and measures have been taken for its vigorous prosecution. The obvious design of Congress, in these appropriations, was to locate and open roads which should meet present emergencies and the demands of emigration, and not to introduce a system of improvements which would require other and larger appropriations to be made, from year to year, for their completion. With this view, and to secure the speedy and economical construction of these great and extended thoroughfares, it was deemed expedient to appoint a superintendent, and organize a suitable corps of operatives on each road. Each superintendent was instructed to pass over the entire length of the section of the route assigned him, locating it on the most direct and advantageous ground, and opening and improving it in such a manner as to admit of the easy passage of a loaded wagon.

The immediate direction of the movements of these several parties was placed by me in charge of a gentleman of experience; and so soon as full information of the operations of the past season is received, I will cause him to make a detailed report of their progress, for the purpose of laying it before Congress.

The Fort Ridgely and South Pass road has

already been opened as far West as the Missouri river, a distance of about two hundred and fifty miles, and the country through which it runs is reported to be a rich and desirable one for settlement. The appropriation for this work has, however, been exhausted, although some four hundred and fifty miles remain to be completed. To finish this portion of the road, should it be the pleasure of Congress to carry out its original design, an additional appropriation of thirty thousand dollars will be required, and it should be made at an early day.

☞ The Dayton, Delaware, and Clevelany line runs on a new time table on Monday week.

#### ATLANTIC AND GULF R. R., GEORGIA.

The following is an act passed by the legislature of Georgia for the benefit of this company. We understand that such an arrangement has been made between the Atlantic and Gulf and the Brunswick and Florida R. R. Companies, that the former company can avail itself of the provisions of the act.

#### AN ACT,

To explain an Act, entitled an Act to incorporate a Rail Road Company, to be called the Atlantic and Gulf Rail Road Company, and for other purposes therein named, approved February, 27th, 1856, and for other purposes.

Whereas the Legislature of 1855 and 1856 granted a charter incorporating a certain railroad company under the name and style of the Atlantic and Gulf Rail Road Company, authorizing the Governor of the State to subscribe for Stock in said Rail Road Company, when certain conditions had been complied with specified in said charter; and whereas the Fifth Section of said charter contained the following proviso: "But no payment shall be made on the part of the State until the Savannah, Albany and Gulf Rail Road Company and the Brunswick & Florida Rail Road Company shall have released any right, which either of said Companies have, or claim, to interfere with the location of said road on account of any privileges granted in the charter of either of them;" and whereas doubts have arisen as to what construction may be put on the said words requiring said relinquishments.

Section 1st. Be it therefore enacted by the Senate and House of Representatives of the State of Georgia, in General Assembly met, that whenever the Companies aforesaid shall have made relinquishments to the said Atlantic and Gulf Rail Road Company, in the following words, to wit: The Savannah, Albany and Gulf Rail Road Co., or the Brunswick and Florida R. R. Company, (as the case may be) do hereby release to the Atlantic and Gulf Rail Road Company the right of way for the main line over the territory covered by its charter from a point at or near the Initial point of said Atlantic and Gulf Rail Road Company, to the Western boundary of the State of Georgia, the said Brunswick and Florida R. R. Company reserving to itself all other rights and privileges granted by the charter, except the right of way aforesaid, and the right of franchise of three



hundred feet (300) on either side of said line—then and in that case the Governor for the time being shall be authorized to pay over to the said Company the subscription on the part of the State, according to the provisions and requisitions of said charter.

Section 2d. Be it further enacted, that if the relinquishment or release contemplated by the Act to said Atlantic and Gulf Rail Road Company by the Brunswick and Florida Rail Road Company; shall not be made within thirty days after the passage of this Act, then and in that event, the Governor be and is hereby required without any release or relinquishment whatever, either from the Brunswick & Florida Rail Road Company or from the Savannah, Albany & Gulf Rail Road Company, to pay the subscription of the State to the Atlantic and Gulf Rail Road Company: then and in that event all laws, and parts of laws, requiring any release of any rights from either the Savannah, Albany & Gulf Rail Road Company or the Brunswick & Florida Rail Road Company, before payment shall be made on the part of the State of its subscription to the Atlantic & Gulf Rail Road Company be, and the same are hereby repealed.

Section 3d. Be it further enacted, That all laws and parts of laws militating against the provisions of this Act, be and the same are hereby repealed.

JOHN W. H. UNDERWOOD,  
Speaker of House of Reps.

WM. H. BROWN,

President of the Senate, pro. tem.

Attest (signed)

ALEX. M. SPEAR, Clerk House of Reps.

(Signed)

W. B. TERHUNE, Sec'y Senate.

(Signed) JOSEPH E. BROWN, Governor.

SECRETARY OF STATE'S OFFICE,

Milledgeville, Ga., Dec. 2d., 1857. }

I hereby certify that the foregoing is a true copy of the enrolled Act of deposit in this office.

Given under my hand and seal of office the day and year aforesaid.

(Signed)

E. P. WATKINS,  
Secretary of State.

## TRUSTEES OF RAILROADS IN VERMONT.

### AN ACT IN RELATION TO TRUSTEES OF RAILROADS.

*It is hereby enacted by the General Assembly of the State of Vermont, as follows:*

Sec. 1. It shall be the duty of trusteea in possession of any railroad under a mortgage, to call a meeting of the bondholders or creditors, for the security of whose claims they hold such property in trust, at some convenient place on or near the line of such road, in the month of December in each year, by giving notice of such meeting, at least twenty days previous thereto, in two or more daily papers, published in each of the cities of Boston and New York, and in at least one paper published in each county, through which the said road is located, if any such there be; and at such meeting the said trusteea shall submit a report of their business and proceedings according to the usual custom of railroad directors to the stockholders.

Sec. 2. If such trusteea shall omit to call a meeting as in the first section provided, it may be called by any five or more bondholders or creditors, holding claims under said mortgage, the amount or the aggregate of not less than

fifty thousand dollars, any time in the month of January or February following such omission, by giving notice in manner aforesaid.

Sec. 3. At such annual meeting, the bondholders or creditors, under such mortgage, may proceed to nominate not less than three, nor more than five trusteea, under said mortgage, for the year ensuing, to hold their office until others shall be legally appointed in their stead; and on such nomination each bondholder or creditor under such mortgage, by himself or proxy, shall be entitled to one vote for every hundred dollars owing to him, and secured by said mortgage; and a majority of the trusteea so nominated shall be residents of this State.

Sec. 4. The proceedings of such meeting may in a summary manner be preacted by any party in interest, to any chancellor within whose district such road is located, either in court or at chambers, whose duty it shall be forthwith to appoint a day for a hearing, and order such notice to interested parties, as he may deem proper. And at such hearing he shall have power to ratify and confirm such nomination, and make such order and decree for the purpose of transferring the property to such new trusteea as he may deem necessary and just. And such order and decree shall be filed in the office of the Clerk of said Court.

Sec. 5. The trusteea so designated and confirmed as aforesaid, and their successors, shall be a corporation under the name and style of the trusteea of the railroad company, under whose mortgage such trust may have been created, by its corporate name, in which name they shall hold all the trust property, and sue and shall be sued. And as such corporation shall have the right to run, manage and operate said railroad during the continuance of the said trust. The members of the said corporation, so organized, may elect one of their number president, or make such organization as they deem necessary and proper, not inconsistent with the trust, and may fill any vacancies that occur in their number during the term for which they are appointed.

Sec. 6. Every Chancellor within the State shall have jurisdiction of all cases arising under this Act, according to the usages and practice of Courts of Chancery, and of all questions arising out of railroad mortgagea; and shall have power in a summary manner to remove any trustee under any railroad mortgage, whether such trustee be in possession of such railroad or not; and to appoint a new trustee in his stead, whether such trustee be nominated by the bondholders or creditors, as in this Act provided, or not, and may fill any vacancies that may arise in any such trust. The said Chancellor, on application of any person interested, shall have power at any time and in a summary manner to summon said trusteea to appear before him, and may examine them orally or otherwise, touching the business of their trust, and may take such further action in the premises, and make such orders and decrees therein, as in his opinion, justice and equity require.

Sec. 7. This act shall take effect from its passage.

*An Act to expedite proceedings in Chancery in regard to the Trustees of Railroad Mortgagea.*

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. Whenever the owners or holders of notes, bonds, or obligations secured by a railroad mortgage, to an amount of not less than fifty thousand dollars, and in number five

or more, shall deem any trustee of such mortgage to be an unsuitable person to administer such trust, they may apply by petition to any chancellor for the removal of such trustee, and shall set forth in a general manner the grounds and reasons for such removal. The court shall thereupon appoint some short day for hearing such petition, and shall give due notice thereof to the trusteea of such mortgage and to all other persons interested. The court shall take especial care to give notice of such application, and of the time and place of hearing to all persons interested who reside out of this State, by publication in one or more daily newspapers published in Boston and New York.

Sec. 2. Upon the hearing, the petitioners and trusteea and all other witnesses shall be examined orally before the chancellor. The court shall examine as to all alleged breaches of trust, or neglects, or omissions of duty; as to the fitness and competency of the trusteea; as to their holding any other offices or having any interests either of a public or private nature inconsistent in any way with the true interests of the *cestuique* trusts, or interfering in any way with the prompt, fair, and impartial discharge of the duties of such trusts; and generally as to all the circumstances or conduct of the trusteea, which render it inexpedient for the interests of the trusts to continue them in office. If upon such hearing the chancellor finds that such trustee ought to be removed, he shall decree his removal, shall appoint a new trustee in his place, and shall make such orders and decrees as to the transfer and conveyance of the trust property from the old to the new trusteea, as to ascertaining the debts and liabilities of the old trusteea and the payment of the same, as to the future management of the trust and the accounting thereon, and generally as to all other matters and things connected with such trust, as the exigencies of the case, the protection of the old trusteea, and the security and welfare of the trust fund shall require.

Sec. 3. If the trusteea so removed by the order of the chancellor shall see fit, they may within twenty days appeal to the Supreme Court; in which case the application and proceedings therein, and the minutes of the chancellor as to the testimony taken before him, shall all pass to the Supreme Court; to this end the chancellor shall take full minutes of the testimony taken before him. Upon an examination of the papers and the testimony, the Supreme Court may, upon application and notice thereof, order the taking of further testimony if they see fit, or may affirm or reverse the order of the chancellor, and may proceed therein as equity and justice shall require.—The appeal to the Supreme Court shall not operate to remove the new trusteea, or continue the old ones in office, but the new trusteea shall administer the trust until otherwise ordered.

Sec. 4. Whenever proceedings shall have been or shall be instituted in chancery, whether by trusteea or *cestuique* trusts, under this act or otherwise, in good faith and for the benefit of the trust fund, the chancellor before whom such proceedings are pending may, if, in his judgment, he shall deem it just and equitable, order the costs and other expenses of such proceedings to be fixed before him and to be made, in whole or part, a charge upon and be paid for out of the trust fund, so that each person intended to be benefited by such proceedings shall bear and pay his fair and just share of such costs and expenses.

Approved, November 10, 1857.



## MONETARY AND COMMERCIAL.

The great event of the past week in monetary circles has been the resumption of specie payment by the banks of New York, Boston, Albany and Hartford. This places things again on the specie basis throughout New England and New York. This event formally took place last Saturday, although for all practical purposes, specie payments were resumed some days before. Some of the banks of New Jersey have also resumed. The aggregate specie in the New York banks on Dec. 5, was \$26,069,352. Dec. 12 it was \$26,058,877. Some idea of the extent of operations in the New York banks may be gathered from the fact, that the aggregate exchanges for the four years ending October 1, 1857, is \$96,397,808,131.

Stocks have an upward tendency in the Eastern markets. This is partly owing to favorable advices from abroad, and partly to the reinstatement of the banks, and increasing confidence.

In our own markets we notice a continued scarcity of money. The demand is not so great, but the supply of capital is not equal to the wants of the community, hence we notice a stringent market with high prices.

For quotations of stocks, we refer our readers to the annexed circular of Messrs. Hewson & Homes, the well known stock brokers of this city.

In the past week the transactions of the stock market have been more liberal, and have taken a wider range than for several weeks.

In Bonds, we note sales of Covington & Lexington 2d Mortgage 7's, at 55. Little Miami 6's, at 75. Hamilton & Dayton 2d Mortgage 7's, at 70. Indianapolis & Cincinnati 2d Mortgage 7's, at 72. Also, city of Cincinnati 6 per cents., at 85.

In Stocks, we have sales of Indianapolis & Cincinnati shares at 45; Little Miami at 75; Hamilton & Dayton 45; Farmers Bank Ky. stock at 105; these sales, with others which will be found in our table of sales, indicate an improving tendency in prices and tone of our stock market.

Money continues very scarce and difficult of access for all the ordinary uses of trade. Negotiations of paper, except of an undoubted character, are of very rare occurrence, and at very high rates; 2 to 3 per cent. per month have now become familiar rates for very fair paper, and most parties think themselves fortunate in having their necessities supplied at even the highest rates. In the last few days there has been more disposition manifest to buy paper; several transactions have come under our observation in the last day or two which would not have been discussed two weeks since; those who have money are getting tired of letting it lie in bank idle. Capital is thus becoming more actively employed.

New York Exchange has maintained a very firm and unvarying price in the last week, with a supply full equal to the demand. We quote 1 to 1½ as the buying and selling rates. Philadelphia checks are bought at par, and sold at ½ prem. On Baltimore checks are 2 to 3 per cent. discount. New Orleans Exchange 1½ premium.

A large amount of money is being paid out for hogs, which will soon find its way into the ordinary channels of business, and give a large amount of relief to the trading community.

Gold is inactive, and can be had at 1½ prem. Brokers are paying but 1 per cent. prem.

## PITTSBURGH AND CONNELLSVILLE R. R.

The following gentlemen have been elected directors of this road for the ensuing year: Benj. H. Latrobe, Thomas Bakewell, Joseph Pennock, Samuel Long, Wm. J. Anderson, Chas. H. Paulson, William Phillips, Alexr. Miller, Daniel R. Davidson, Cyrus P. Markle, Benjamin Deford, of Baltimore, Wm. F. Murdock, do.

## Reliable Books for Travelers.

## DINSMORE'S

## R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains Official Time Tables with References; Combined Railroad Routes; Steam Navigation; Gazetteer. Price 25 cents, with Large Map

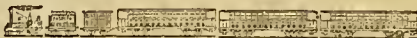
DINSMORE'S THIRTY MILES AROUND N. YORK, By Railroad, Steamboat, Stage, Express and Telegraph; or how to get in and out of the Metropolis. An alphabetical list of 1000 places. Price 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Fink Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents. DINSMORE & CO., dec10 9 Spruce street, New York

## INDIANAPOLIS,

Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI  
SHORT LINE RAILROAD  
VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

## THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

Chicago Express.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Danville, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

## VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

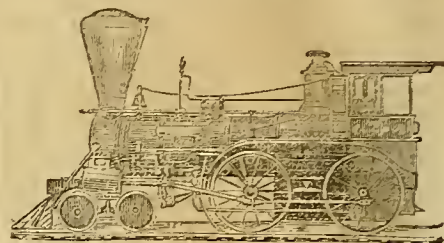
Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M. H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.

APPLEGATE & CO.,  
Booksellers, Publishers, Stationers & Blank  
Book Manufacturers,  
43 Main St. Cincinnati, O.

CINCINNATI  
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch. ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Ca Hand, and Signal Lanterns.

Cotton Duck for Cr Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish. Coach Japan and Glue; Putty, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers.

Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass.

toc6.

## GEO. D. WINCHELL &amp; BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Conplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the lowest price.

L. (The highest prize) awarded  
Champion Pumping Engine at the late da  
Ohio Mechanics' Institute. June 18, 1853 F1



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds.	Name of Company.	Quot of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Net Earnings.	Last Dividend.	
\$1,000,000	6			1860	1st mortgage.	.....	Albion & Erie, L. & H. p. r.	.....	173	5,000,000.00					
494,800	6			1862-3	2d	.....	Androscoog & Kennebec	.....	54.55	1,400,000.00		209,475.46	110,246.98	none.	
199,000	7	July & Jan.			Domesic.	.....	Atlanta and LaGrange.	.....	86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	8 pr. ct.	
52,646	6			now	"	.....	B'g'r, Old T. & Millford.	.....	12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in 53	
500,000	6			1860	"	.....	Boston & Worcester.	.....	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,032.03	180,000 4.6m	
500,000	7		N. Y.	1865	1st mortgage.	.....	Buffalo & State Line.	.....		1,300,000.00				5 pr. ct. 6m.	
300,000	7			1857-9-62	Income.	.....	"	.....							
200,000	7			1864	Domesic.	.....	"	.....							
577,187	6			1872	4th mortgage.	.....	Central Ohio.	.....							
192,200	7			1874	2d	.....	Champlin & St. Lawrence	.....	43	1,872,800.00	1,001,987.00	163,200.00	77,700.00	10 per ct.	
380,000	7				Domesic.	.....	Ch'r'l'ic & South Carolina.	.....	119	1,700,000.00	380,000.00	291,219.86	47 per ct.	\$72,300	
1,140,000	6-7-8		N. Y.		1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	.....	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m	
1,300,000	8				2d	.....	"	.....							
374,000					Convertible.	.....	"	.....							
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa.	.....							
532,000					2d	.....	Cin. Will'ng'n & Zanesville.	.....	132	1,761,149.16	2,241,500.00	221,491.96			
104,000					3d	.....	"	.....							
305,500					Income.	.....	"	.....							
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	.....	139	4,741,220.00		1,373,754	700,804	6 per cent.	
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning.	.....	85	1,500,000.00					
490,000	7			1861	2d	.....	"	.....							
0,000 0	6			1873		.....	Cumberland Valley.	.....	52	1,218,300.00		160,511.56	81,101.56	\$33,250.24	
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	.....	52	1,000,000.00	1,000,000.00				
350,000	7					.....	Eastern Railroad.	.....	93 6-10	3,245,900.00		665,578.79	368,077.84	\$234,133	
740,000	10			1869	1st mortgage.	.....	East Ten. & Virginia.	.....	130	625,450.00		30,897.20	19,092.30		
88,000	10			1861	2d	.....	Essex Railroad.	.....	20	700,000.00					
400,000	10			1864	1st mortgage.	.....	Evansville & Crawf'd'vle	.....	109	2,228,657.00		243,970.42	136,061.90	\$133,281.45	
200,000						.....	The Fitchburg (Mass.) R. R.	.....		2,540,000.00		681,162.52	213,837.81	3 per cent.	
100,000	0				1st mortgage.	.....	Fox River Valley.	.....	33	800,000.00					
100,000	7				1st	.....	Fair Haven Branch.	.....	15	300,000.00		50,381.23	14,822.45	\$166,240.00	
300,000	7				1st	.....	Georgia R.R. & Banking Co.	.....	233	4,156,000.00		1,068,202.54	337,689.42	\$166,240.00	
4,000,000	6 1-0			1858	1st	.....	G't Falls & Conway R. R.	.....	20			27,376.69	14,207.07		
2,000,000	7			1860-70	2d	.....	G't West'n R.R. of Can.	.....	281 1/2	4,191,550.00		2,068,236.00	339,196.50	8 pr. ct.	
1,812,000	7			1860	3d mortgage.	.....	Housatonic Railroad.	.....	74	2,000,000.00		339,196.50	176,529.98		
12,885,000	7			1875	1st	.....	Hudson River.	.....	144	4,000,000.00		1,924,382.44	718,037.40		
4,115,000	7			1875	2d	.....	"	.....	144	4,000,000.00					
3,000,000	7			1875	3d	.....	Illinois Central R. R.	.....	704	18,453,376.00		1,476,035.27	1031,499.08	7 pr. ct.	
600,000	7			1860	Freeland.	.....	"	.....	704	3,558,376.00					
700,000	7	Nov. 1.			1st mortgage.	.....	Indiana Central.	.....	72 4-			351,871.00		3 pr. ct.	
50,000	7	Jan. & July 1			2d	.....	"	.....							
700,000	7			1862	1st	.....	Iron R. R.	.....	13	123,700.00					
					1st mortgage.	.....	Kentucky Cen. 2d Div.	.....		719,500.00					
						.....	Knoxville & Kentucky.	.....							
						.....	Laurens (S. C.) R. R.	.....	32	166,000.00		23,233.59	14,233.59		
						.....	Louisville & Nashville.	.....	184			50,224.71	14,149.13	\$8,000	
					1st	.....	Lowell & Lawrence.	.....	12 35-	300,000.00		587,236.57	162,277.50	10 pr. ct.	
218,000	7			1866	2d	.....	Mad River & Lake Erie.	.....		2,697,090.00					
1,000,000	7			1875	3d	.....	"	.....		2,697,090.00					
2,000,000	6				1st	.....	Manchester & Lawrence.	.....	26	1,000,000.00				\$24,000	
2,500,000	7			1868	1st	.....	Marietta & Cincinnati.	.....							
2,000,000	7 and 8			1874	2d	.....	"	.....							
60,000	8			1867	1st	.....	Mexican Gulf R. R.	.....	27						
430,000	8				1st mortgage.	.....	Milwaukee & Horicon.	.....	30						
320,000	8			1881	1st	.....	Mineral Point R. R.	.....	32						
320,000	1-68			1868	2d	.....	"	.....	32						
6,000,000	6			1884	1st	.....	Mobile & Ohio.	.....	497	10,000,000.00		253,498.96	162,862.24		
500,000	7			1869	1st mortgage.	.....	Nashua & Lowell R. R.	.....	15	600,000.00		193,752.42	55,501.74	7 pr. ct.	
8,356,000	7	May & Nov.	N. York			.....	New Haven & North'm'n	.....	55	922,500.00				2 pr. ct. 6m	
32,802,500	6	June & Dec.	N. York			.....	New York Central.	.....	555	23,067,400	14,763,897	7,707,348	3,609,481	3 pr. ct. 6m	
000,000	6			1864	Con. till 1859.	.....	"	.....							
936,000	7			1873	2d	.....	N. Y. & Harlem R. R.	.....	133	6,717,100.00		1,040,293.26	64,678.71	\$37,692.30	
411,700	7			1864	1st	.....	"	.....							
500,000	7			1863	1st	.....	N. Y., Prov. & Boston.	.....	50	1,58,000.00		245,713.00	51,544.40		
300,000	6				2d	.....	N. Lon., Willim'tu & Pal.	.....	66	1,700,000.00		120,571.50		\$25,000	
						.....	"	.....							
						.....	Pontchartrain R. R.	.....	5	500,000.00					
						.....	N. O., Opel'o's & Gr. t. West.	.....	62 1/2	6,000,000.00		116,795.00	366,118.20	7 pr. ct.	
1,500,000	6			1873	1st mortgage.	.....	N. Y. & New Haven.	.....	103 1/2	3,000,000.00		1,007,666.48			
1,000,000	6			1873	2d	.....	"	.....							
2,000,000	6			1885	3d	.....	"	.....							
1,500,000	7			1850	1st mortgage.	.....	North Western Va. R. R.	.....						7 pr. ct.	
3,000,000	5					.....	"	.....							
419,200	7			1877		.....	Northern (N. Y.) R. R.	.....	118	2,000,000.00		600,000.00			
221,800	6			1860		.....	North Missouri R. R.	.....	19 2-			25,176.74	88,458.56	2 1/2 pr. ct.	
						.....	Norwich & Worcester R.R.	.....	60	2,111,500.00		304,236.33			
						.....	"	.....							
400,000	6			1866	1st mortgage.	.....	Ogd'nsh'g. Clay'tn & Rome	.....	94			289,690.10	137,875.93	5 pr. ct.	
1,200,000	7			1875	2d mortgage.	.....	Ontario, Simcoe & Huron	.....	88 3-	2,937,500.00		276,339.09			
200,000	8			1868	1st mortgage.	.....	Orange & Alexandria R.R.	.....							
300,000	8			1873	1st	.....	"	.....							
						.....	Peoria & Bureau Val. R. R.	.....	47	1,500,000.00				6 pr. ct.	
350,000	6					.....	"	.....							
800,000	7			1861	1st mortgage.	.....	Philadelphia & Trenton.	.....	28 1-5	1,000,000.00					
				1864 to 1874	1st	.....	Portsmouth & Concord.	.....	47						
						.....	Potsdam & Watertown.	.....	76	2,000,000.00					
1,260,000	6			20 years.	1st mortgage.	.....	Rutland & Washington.	.....	62 1/2	950,000.00		68,525.42			
						.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00					
						.....	Salem & St. Louis R. R.	.....	168 3/4	400,000.00					
					1st mortgage.	.....	Snd'sky, Mans'fd & New'k	.....	116				19,050.64		
500,000	6				1st	.....	Sullivan Railroad.	.....	26	500,000.00		75,246.06	17,378.08		
250,000	6				2d	.....	"	.....							
						.....	Tennessee & Alabama.	.....	145			39,586.44		11m. 12 pr. ct	
1317,000					1st mortgage.	.....	Terre Haute & Richmond	.....	73	1,294,450.00					
300,000				1861	1st mortgage.	.....	Toledo, Wabash & Western	.....	212						
198,000				1840	2d	.....	Troy & Boston.	.....		1,000,000.00					
262,500				1875	3d	.....	"	.....							
						.....	"	.....							
2,500,000					1st, 2d, 3d	.....	Vicksburg & Jackson.	.....	46				165,076.04		
						.....	Virginia & Tennessee.	.....	215	3,000,000.00		322,048.60		2 pr. ct.	
596,000	7				1st mortgage.	.....	Westchester (Pa.) R. R.	.....	31	165,000.00					
200,000	7				2d	.....	Wilmington & Manchester	.....	171						
						.....	"	.....							
						.....	Winchester & Potomac.	.....	32						
						.....	Worcester & Nashua.	.....	45 69.						



**GENERAL  
RAILWAY SUPPLY AGENCY.  
SNOOK & HILL'S PATENT  
LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**

**Mechanical Engineer,**

AND

**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

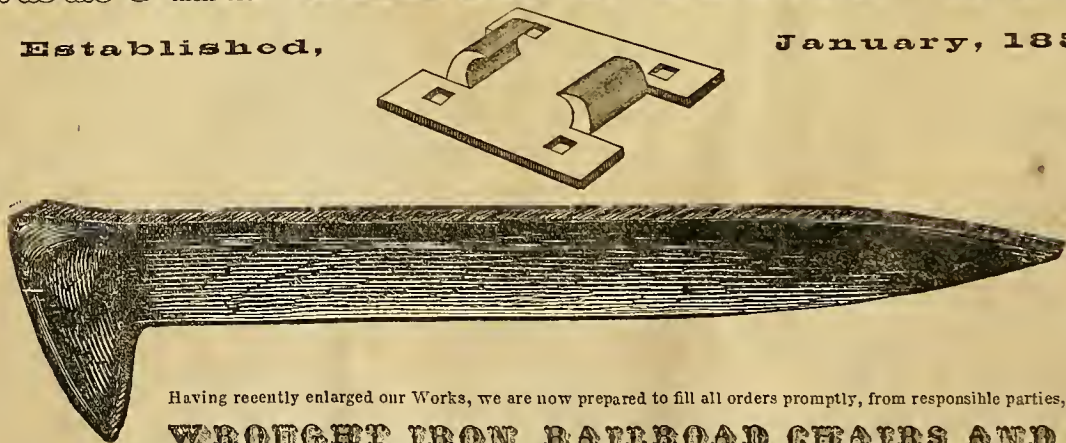
For Applications for Letters Patent. Careful written  
Opinions of Inventions. Important aid in bringing out  
Inventions. nc23

**CINCINNATI WROUGHT-IRON**

**RAILROAD CHAIR & SPIKE WORKS.**

Established,

January, 1852.



Having recently enlarged our Works, we are now prepared to fill all orders promptly, from responsible parties, for

**WROUGHT IRON RAILROAD CHAIRS AND SPIKES.**

We have in use a patented Machine, for which we hold the exclusive right in the West, for manufacturing Wrought-Iron Chairs upon an Improved Method. The great superiority of our Chairs over all other (things called chairs,) made in the West, is, 1st: The peculiar construction of our Machinery enables us to increase the thickness of the lip at the base or through the bottom of the head where the greatest strength is required, and diminish through the edge or top of the lip where there is little or no strength required. 2nd: We can adjust our Machine so that we can shear the lip to the point we wish to turn it over, without tearing or injuring the fibre of the iron. 3d: Our Chairs are smooth and level upon the bottom, giving a smooth bearing upon the cross-ties, and also presenting a uniform, even surface for the rail to rest upon that is held by the Chair. 4th: The Chairs made upon this machine are all uniform, one being a duplicate of the other, with perfect lips on every chair, without destroying the fibre of the iron in turning the lips over. All these advantages no other machine can or does accomplish, that is now in use in the Western country.

We are also manufacturing all sizes and styles of HOOK-HEAD RAILROAD SPIKES, with reversed points for longitudinal ties, made from best quality of iron, manufactured expressly for our use. Boiler Rivets of all sizes and lengths, made from a No. 1 Charcoal Iron, constantly on hand. We are also now building, and will soon have in operation, a patented machine for making Hot-Pressed Metallic Nuts and Washers, of all sizes. All articles manufactured by us are made from best quality of iron, selected with especial reference to please our patrons.

Before making contracts for CHAIRS AND SPIKES, we particularly invite the correspondence of Engineers, Superintendents and Railroad men in general, and can and do manufacture better Wrought Iron Chairs than is made in the Western country. With pleasure we refer to articles manufactured by us, which will speak for themselves. Samples sent to any parties wishing to examine them.

au 20.17

Works and Office, North side Congress St., East of Canal Bridge.

**J. B. GREEN & BRO., Proprietors.**



## Most Direct Route to the East.



## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.  
FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,  
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,  
Supt. Terre Haute & Richmond R. R.

## PAGES'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improvedatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1857. November 9. 1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.  
THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,  
To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 8:30 P. M. Evening Express, through to Bellair and Pittsburgh without change of cars.

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 4:40 P. M., for Springfield and Columbus.

This train also makes connections for Wilmington, Lancaster and Zanesville. This train stops at all points between Cincinnati, Springfield and Columbus.

FOURTH TRAIN.—Cleveland, Pittsburgh and Wheeling Night Express, leaves Cincinnati at 8:30 o'clock P. M., for all the Eastern cities.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House; or at the Old Office, south-east corner Broadway and Front, opposite Spencer House; or at the Eastern Depot. J. DURAND, Supt.

E. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE.—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS.—At 6 A. M. and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA.—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,  
Acting Superintendent.

Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,  
Ag't Cin. and St. Louis Omnibus L.  
Office No. 2 Burnet House.

Jan2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan8 1y 119 Walnut st., Odd Fellows' Building

1857. Summer Arrangement. 185

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, PHILADELPHIA, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPORT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:36, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

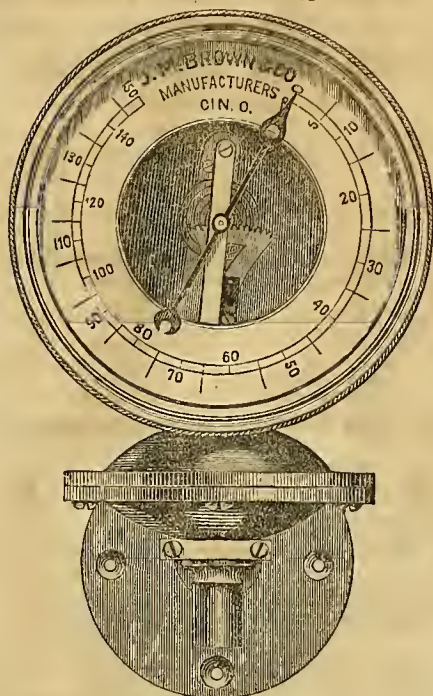
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR

### LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes Copying.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.  
N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

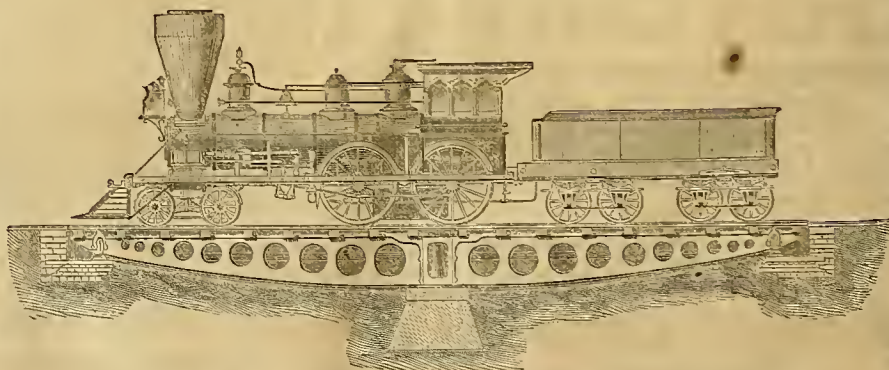
Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers & Co. —LATE— BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING and SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of Engineers and Machinists' Tools; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, J



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING.....DECEMBER 24, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 44.

#### EDITORIAL.

The Great R. R. Celebration of 1857.....	661
The Early History of Railroads—Baltimore and Ohio Railroad.....	661
Oregon.....	662
Borax Lakes.....	662
RAILROADS.	
Louisville and Nashville R. R.....	662
Suabury and Erie R. R.....	664
Sacramento Valley R. R., California.....	665

#### MISCELLANEOUS.

Stock Subscriptions.....	664
Railroads and Steamboats.....	665
Railways of the United Kingdom in 1856.....	666
MONEY AND STOCKS.	
Monetary .....	668

#### THE GREAT R. R. CELEBRATION OF 1857.

—We have received the prospectus of a work under the above title now in press, from the pen of W. P. Smith, Esq. of the Baltimore and Ohio R. R., and to be published by D. Appleton & Co., of New York.

This volume is intended to supply the want of a full and faithful Record of the GRAND RAILROAD EXCURSIONS AND ENTERTAINMENTS of 1857, and to preserve therewith the NAME of EVERY PARTICIPANT in those interesting occasions.

The book has been prepared with much labor and care, and will be found to possess a permanent value to all readers, but especially to the great Railroad Community, and to the numerous guests and others connected in any manner with the late excursions and celebrations.

The work is to be published by subscription at \$1.25 per copy.

VOL. 5.—No. 44.

#### THE EARLY HISTORY OF RAILROADS—BALTIMORE AND OHIO RAILROAD.

The early history of Railroads, contrasted with their present more perfected condition exhibits very strongly the advance of practical science. One of the last completed roads of iron, was one of the earliest commenced. This was the Baltimore & Ohio. Some notice of its progress through nearly thirty years, from the beginning to the end, may not be without interest.

The citizens of Baltimore were among the very first to perceive the immense commercial advantage to be derived from connecting the waters of the Ohio with those of the Atlantic. The first plan was to make a canal from the Chesapeake to the Potomac. To ascertain the practicability of this enterprise, the United States Engineers were directed to survey and report upon it. Their report determined the practicability, but its almost commercial impossibility, for such a canal, passing a mountain range, would require hundreds of locks, many of them from 1000 to 2000 feet above tide water, where, for four months in the year, they would be frozen. Abandoning this plan, (although strongly favored by many enlightened public men), a meeting was held in Baltimore on the 12th of February, 1827, which heard various documents and statements made on the subject of Railroads. The meeting concluded that these were most suitable, and recommended "that measures be taken to construct a double railroad between the city of Baltimore and the Ohio River."

In consequence of this meeting, applications were made to the Legislatures of Virginia and Maryland, which granted most liberal charters, which were also acceded to by the Legislature of Pennsylvania.

When the hooks for subscriptions were opened, the stock was taken at once, and the State of Maryland added a liberal subscription. On the 4th of July, 1828, the ceremony of laying the first stone was performed, and in the Autumn of the same year the work was fairly commenced. In the Report of Mr. Thomas, made several years after, he said: "The embankments, viaducts, bridges, and culverts were accomplished in a manner not surpassed in this or any other country." As we have often passed over that portion of the Baltimore Road, we are inclined to think this statement true. The splendid viaduct near the Relay House is yet a model work.

While the road was yet in its incipient state, the managers sent Jonathan Knight, Civil Engineer, Capt. W. Gibbs McNeill, of the United States Topographical Engineers, and St. George W. Whistler, of the Army, to England, and prior to their return, they visited and minutely examined one of railroad of note in the kingdom. They ere is the rude execution of the original conception, and traced its gradual improvement, and as the conclusion, from their observations, expressed the unhesitating conviction "of the general efficacy of railroads as a speedy, certain, and economical means of conveyance."

At this point, we may remark upon the early ideas entertained of railroads, and the actual results. It is stated by Mr. Thomas in his Report, dated December, 1831:

1. That they entertained no doubt that the graduation, masonry, and construction, with a double set of tracks, may be accomplished between the present termination (on the Potapsoo River) and the Ohio River, at the original estimate of \$20,000 per mile.

2. That for a distance of 180 miles (to Cumberland,) the road could be made with only two summits requiring stationary power.

3. That these summits may be approached with grades of only eighteen feet per mile.

4. That the inclined plane at Par Spring Ridge, with a stationary engine, with which, taking the entire line together, it will be decidedly superior to a level road.

5. From the experiments made on the Baltimore Road, there is no reason to doubt that traveling may be safely carried on over it at from twelve to fifteen miles per hour!

Such were the results arrived at, after a series of experiments on the Baltimore Road in 1831. Let us, for a moment, compare them with the actual results at the present day.

The Baltimore Road was estimated at \$20,000 per mile, with double track and inclined planes. But the road actually cost \$50,000 per mile, but without inclined planes, which, of course, would be cheaper; but, in fact, was made with inclined planes at the Par Spring Ridge, and a stationary engine. But, after a few years, the inclined planes were taken away, and the road made more curved, but through the ravine of a stream where it should have gone in the first instance. The early ideas of railroads were founded on the idea that roads could go nowhere to advantage, except on nearly level ground. Accordingly we find the engineers reporting that this ridge could be approached at a grade of eighteen feet, as if some such grade as that was necessary. The plan of making railroads then was to run on nearly level ground to the foot of a ridge, and then put a stationary engine at work, with inclined planes. It was supposed first, that the ridges could not be surmounted with a practicable grade, and next, that more was gained by passing over the level at a good gait, than was lost by the ridges. This proved a mistake on both points. As to the gain on the levels, the inclined plane at Par Spring Ridge proved a positive obstruction and a greater delay, than a grade of fifty feet for a hundred miles. It was a delay, and a grievous inconvenience. The idea was then, that fifty feet was the maximum of a practicable grade. But so far from that, that experiments soon proved that loaded cars could easily ascend two hundred feet to a mile, and more recent experiments proved that they could ascend a much higher grade. The result was, that the inclined planes were soon given up as utterly useless and very inconvenient.

The power and capacity of Locomotives and Cars were also greatly underrated. From 12 to 15 miles were the estimated rate per hour. The real average rate is about twenty miles per



hour, inclusive of all stoppages, delays, &c. But, the *running* time on this, and on many roads is 30 miles per hour. On the New York Central, we have gone on a regular train 40 miles in one hour—and for a short time 50 miles. The truth is, that in the early period of Rail R. history, the power of a Locomotive, or, in other words, of *Steam on Land*, was greatly misunderstood. We now see, the Baltimore & Ohio Road with 120 feet grade to a mile—over which the powerful Locomotives carry long trains of Cars as if they were nothing, and surmounting the Alleghenies, where canals must have had hundreds of locks, and even Railroads were supposed impracticable, except by the aid of stationary engines, and long inclined planes.

This brief review shows how immensely has *practical science* applied to Railroads advanced in the last thirty years. We are not sure, that it may not advance as much more in thirty years to come. The Locomotive is yet a lumbering affair. The iron bars are susceptible of improvement; and much may yet be done to improve Railroads.

OREGON.—The aggregate value of taxable property in Oregon, as assessed for the year 1857, is \$17,046,716. The total population is 43,207; number of voters 11,668; males 26,604; and it is estimated that there are 150,000 acres of improved and 300,000 acres of unimproved farming land in Oregon. The farms are valued at \$5,000,000, and the live stock at \$2,500,000.

It is estimated that 150,000 gallons of wine were made in the State of California during last year; this year the product will be 350,000 gallons wine; and 50,000 gallons brandy, most of which is made in Los Angeles County. The wine is worth \$1 per gallon and the brandy \$2. The total number of gallons of wine, brandy, whiskey, gin and rum imported into that state in a year amounts to 4,173,328 gallons, and costs to the importer \$4,252,044. In addition to the above there is also imported about 50,000 gallons of alcohol.

BORAX LAKES.—The surveyor of Naper County, California, in his report to the Surveyor General thus describes the Borax Lakes: The principal borax lake is situated about half a mile north of the north shore of Clear Lake. It presents a surface of over 300 acres, so highly impregnated with borax that it can not be held in solution, and is found in crystalized particles, from very small up to half a pound weight, in sand below. A man can take out over one hundred pounds pure borax in a day. One and a half miles north, over a high miner's ridge, is found the sulphur bank, from 25 to 30 acres, supposed to be 30 feet thick, the stream below constantly bursting up crusts in a conical form, and forming new sulphur in the cavities, presenting a very beautiful appearance. The whole machinery is in such active operation that if the sulphur should all be removed it appears that it would soon form again.

## Railroads.

### LOUISVILLE AND NASHVILLE R. R.

The following are extracts from the annual Report of the President of this company for the year ending Oct. 1, 1857:

*The President and Directors of the Louisville and Nashville Railroad Company submit to the Stockholders their Annual Report, beginning the First Day of October, 1856, and ending October, 1857.*

"The engineer in his report states the condition and cost of work according to the geographical divisions assigned his official corps. Believing it would be more satisfactory to the stockholders to know the stage of work and the sums required to complete the grade from one business point to another along the line, it is thought proper to report in that form.—Beginning in Louisville it is known the track is laid to the bank of the Rolling fork, a distance of 31 miles on the main road. The bridge across the Rolling fork in two spans of two hundred feet each is now complete, and track is being laid south of Rolling fork, having advanced over one mile, may, by or in November, be carried to section 36, seven miles short of Elizabethtown, in Hardin Co. Nothing occurring to interrupt the present progress of work, it is believed that by the first day of April the grade will be prepared for track passing over Muldrough's hill, and by mid-summer or fall be extended to a point two and a half miles south of Green river, distant from Louisville about seventy-five miles; and allowing a reasonable delay for the erection of bridges, the track may be laid to a point within a half or three-quarters of a mile from the north bank of Green river within the next year. To cross Green river with the track is a matter of moment in the business transactions of the road, and the most energetic measures should be taken to accomplish that object at the earliest possible day.

Estimated cost to complete grading, bridging, and masonry to the south bank of Nolin, fifty-two miles from Louisville, dating the calculation from 1st September, excluding the tunnel section, and including the cost of the temporary track to avoid the tunnel.

	To be paid in Bonds.	To be paid in Cash.	Total cost.
Masonry .....	\$4,870	\$43,389	\$48,259
Grading .....	8,951	50,270	59,221
Bridging .....		54,000	54,000
	\$13,821	\$153,559	\$167,380
From Nolin to section 73, near the north bank of Green river.			
Masonry .....	\$ 207	\$ 483	\$ 690
Grading .....	10,343	43,161	54,104
Bridging .....		2,500	2,500
	\$11,155	\$46,144	\$57,299
From section 73 to 77, suspending the Green river Bridge, grade and masonry.			
Grading .....	\$11,517	\$18,535	\$30,052
Masonry .....	32,196	35,196	67,392
Bridging .....		50,000	50,000
	\$43,713	\$103,731	\$147,444
Total .....	\$68,684	\$303,434	\$372,118

In the above calculation no estimate is made for bond payments in contract for the truss of bridges. There is reason to believe that bonds may be used for that purpose to amount of twenty, if not thirty per cent. If to twenty-five per cent the bond payments will be increased to \$95,273, and the money payment reduced to \$276,809. There has been expended on that part of the road to 1st September \$284,162. The work done in September to be paid for 10th October amounts to \$20,000. The bridge across Green river will be one thousand feet long and one hundred and thirty feet high. From the point to which the track will reach this fall to a point two and a half miles south of Green river is about forty miles. The cost to iron that part of the road will necessarily depend on the cost of iron delivered at Louisville. It is believed that contracts might now be made for the best American rail at sixty-seven dollars per ton. Assume that as the price of iron, it will cost about three hundred thousand dollars to ballast the road from the junction to the top of Muldrough's hill, to buy the iron, chairs, spikes, and cross-ties, and lay the iron on track for the forty miles. This sum of three hundred thousand dollars must be created in addition to the available means now at the command of the Company, if it is desired to press the entire grade, masonry, and bridging to completion on the whole line, within the next two years."

"If the road can be made complete for business across Green river, and the State of Tennessee shall extend its usual aid to iron that part within that State, forty-five miles, there will be one hundred and twenty miles of road in track for business, which leaves only sixty-five to provide with iron.

With such presentation of the affairs of the road, under ordinary circumstances attending the construction of roads, there would be no just reason to doubt the ability of the Company to command means with its mortgaged bonds. The present business of the road warrants the conclusion that if the track can be placed beyond Green river, and out from Nashville thirty miles, and the Company left without any other resource, they could safely rely on income bonds on the road to an amount sufficient to complete and reasonably furnishing it. Such bonds beginning their maturity at the end of three years and spreading over a period of seven years, operating as a first mortgage and pledge of the income of the Company bearing seven or eight per cent, it is believed would find a market within the States of Kentucky and Tennessee.

From the point two and a half miles south of Green river to the north boundary of Warren county, a distance of twenty-one miles, is presented the greatest, if not the only obstacle now in the way of a speedy completion of the grade. The first nine miles are not un-



der contract. The work is not heavy, and with vigorous operations may be commenced next spring and completed within the time the more difficult parts can be completed.— From the end of the nine miles to the Warren county line is under contract. By the 1st of October the value of work done on it will amount to \$17,000. Vigorous operations on that part of the grade is indispensable, if it is desired that a continuous track reach Bowling Green in the next two years.

The estimated cost from October to complete that part of the grade is \$246,000. By the contracts already made, and from proposals made to grade that part not under contract, it is known that of the sum named, bonds of the county of Hart may be used at par to amount \$47,000, which leaves a money expenditure of about \$216,000 necessary to the completion of the twenty-one miles. To the contractor from north boundary of Warren to Bell's, nothing has been paid, his contract only requiring payment at the end of one year; 1st December next. It is in reference to the continuous and vigorous prosecution of this part of the line the suggestion is made to create additional means to amount of \$300,000 to secure the iron to lay track within the next year across Green river.

From the north boundary of Warren county to the State line constitutes the fourth division, a distance of forty-two miles.

There has and will to 1st October have been expended on that section ..... \$225,000  
Necessary to the completion of the grade, masonry and bridging ..... 147,225  
Of these two sums there has and is to be paid in Warren and Simpson bonds ..... 122,980

The subscription of Warren by its terms required one half to be expended north, the other south of Barren river.

Sixteen sections south of Bowling Green have been completed, and by December the number will be increased to twenty-six, and by April the entire grade to the State line will be completed. The section lying north of Barren river in Warren county will be completed in the spring or summer of 1858. Making a continuous completed grade of forty-two miles on that part of the line. Bowling Green is one hundred and thirteen miles from Louisville and seventy-two from Nashville."

The fifth section extends from the state line to Nashville.

The value of work done on that division to 1st September is ..... \$281,944  
Of that sum there is paid by contract in bonds at par ..... 47,000  
The value of work done in September to be paid in October ..... 24,372  
Work to be done after October estimated to cost ..... \$80,000  
Of the estimate to be paid in October, and the cost of the work to be done, contractors receive in bonds of Davidson and Sumner ..... 73,800  
Requiring a money expenditure of ..... 229,200  
to complete the graduation, masonry, and bridging in Tennessee.

The nine and one half miles next to Nashville is worked by this company, in connection with the Edgefield and Kentucky Company, each paying one half of the sum remaining to be paid for work to be executed.

The Edgefield and Kentucky Railroad Company pay \$20,000, which leaves the sum to be paid by Louisville and Nashville Railroad \$260,000.

The value of graduation, masonry, and bridging on the thirty miles next to Nashville from September 1st is ..... \$128,000  
Amount to be paid in bonds ..... 17,000  
Money payment ..... \$111,000  
Of the above sum there is to be expended on first nine and a half miles ..... \$40,000  
Of that sum to be paid in bonds ..... 5,700  
Money payment ..... \$34,300

The country through which this part of the road passes is productive and in a high state of cultivation, surpassed by few sections of the State. The surface is regularly undulating, and in the working of the road hard limestone rock is soon encountered on almost every part of the line. Owing to the peculiar formation of the surface, and the hard limestone to handle, it is found impossible to progress with the road sufficiently fast to satisfy a community impatient to be availed of a running road. To that impatience may to some extent be attributed the existence of a difficulty which may have the effect to postpone for a while the track. The Company, through the President, asked the Legislature to extend to their road the provisions of the general law of the State of Tennessee, providing state aid to roads for two years. The Company had let the work to contract to be completed in two years. The facts being communicated to the Internal Improvement Committee, it was agreed to report in that form the bill; but it was supposed by some that the work could be done sooner, and a special bill passed, allowing eighteen months, which time expired about the 1st of June last. The winter of 1855-6 was so intensely cold that operations could not progress. The first, a small estimate, was paid in March, 1856. It was almost a physical impossibility, considering the circumstances surrounding the Company, to have complied with the requirements of that law. The graduation, masonry, and bridges on that part of the line will be ready for track by the 1st of December next, except a few hard places on some three or four of the miles. In this state of case it is hoped the Legislature, at its approaching session will authorize the issuing and delivery of the State bonds to amount of ten thousand dollars per mile. In that event no time will be lost in contracting for iron; on the delivery of which the road will be prepared to allow a continuous track without interruption.

In assuming there has been expended \$795,411, it is to be understood that that is the value of work done on the 155 miles since the beginning of operations in 1855. In the contract there is a per cent. reserved ranging from ten to fifteen, the larger part of which is to be paid in bonds. In some instances where the per cent. retained was large advancements have been made to assist

the contractors. The balance enters into the above sum and are still in the hands of the Company. The number of bonds so remaining with the Company, together with the number to be used in the payment for work to be done, ought to be deducted from the gross number on hand, to show the actual number at the disposal of the Company for cash. Those, to enter into payments for work to be done constitute part of the gross sum estimated as the cost of work yet to be done, and ought to be deducted to show the actual sum in cash to pay for a complete grade, masonry, and bridge truss.

The account thus stated is as follows:

Total number of bonds on hand.....	1,306
Number earned and retained.....	74
Number to be paid for work to be done.....	268
	<hr/> 347
Number to be converted into cash.....	964
Gross estimate of work to be done.....	\$1,142,723
Deduct the bonds to be paid at par.....	368,000
Cash to be paid.....	<hr/> \$874,723
Assets to meet the above sum:	
County and city bonds.....	\$964,000
Bills receivable and cash for sale of bonds...	248,669
Cash on hand.....	18,718
Interest due from counties, assumed at.....	25,000
Private subscriptions, balance assumed.....	15,000
	<hr/> \$1,271,387

No settlement effected with agents to ascertain exact sums.

Nine of the above bonds enter into contracts for ties.

The Edgefield and Kentucky Railroad, on settlement, are to furnish eight.

County bonds on hand:	
Hardin.....	207 1-10
Hart.....	64 6-10
Warren.....	206 4-10
Simpson.....	67
Sumner.....	162 9-10
Davidson.....	125
Louisville city.....	483
Total.....	<hr/> 1,306

#### THE LEBANON BRANCH.

Upon this important branch the Company, since the last annual report met with a series of disasters resulting in much loss, not only by the additional outlay, but by a loss in business on the road. By freshets in the Beach and Rolling Forks the bridges in process of erection were swept away. At Beech Fork both the abutments had to be torn down from defect in the foundations, (in part,) and from defective masonry and material. The most energetic measures were adopted to regain the lost ground. The track is laid to within seven miles of Lebanon, and will be completed by the first day of November, unless prevented by a failure to receive a small additional lot of iron, found necessary to completion. A freight house has been erected at New Haven, to which place freight designed for the surrounding, and the Green river country, is forwarded.

The amount of freight carried to and received from that point exceeds, at present, the capacity of the house—resulting in some embarrassment and delays in forwarding. That difficulty will be removed when the track advances to Lebanon, and crosses Roll-



ing Fork on the main road. The business done on the branch since reaching New Haven shows most clearly that it is to be one of great importance and profit.

Suitable permanent buildings for freight and engine houses are being built at Lebanon, and will be completed by December.

It is believed the business of the branch will be sufficient to pay the cost of running, the interest chargeable to it, and, at no distant day, relieve the Company from the liabilities incurred by reason of its losses and the insufficiency of capital subscribed for its entire completion.

#### MEMPHIS BRANCH.

Preliminary surveys with a view to the selection of a route for this important branch-road have been made. The routes have been examined, and estimates of the cost of each made by a faithful and competent officer, and returned to the office some ten months since. One route passes through Russellville, another through Franklin, and one intermediate—each beginning at a point on the line between the States of Tennessee and Kentucky, where the Clarksville, Memphis and Louisville Railroad line terminates, and two falling into the main road in the vicinity of Bowling Green, the other at Franklin.

The Russellville route is forty-eight and a half miles in length, and estimated to cost when made complete..... \$980,462  
The central route is forty-five and a half miles in length, and estimated to cost when made complete..... 960,361  
The Franklin route, terminating on the main line, twenty miles south of Bowling Green, is thirty-four and a half miles in length, and estimated to cost, when complete..... 756,542

The latter route, imposing the least expense, lengthens the distance from the Stato line to Bowling Green.

The above estimates are very full, and it is believed either route may be fitted for business for \$100,000 less than the estimate.

The selection of the one or the other of these routes will most likely be determined by the amount of available subscriptions offered. The county of Logan made a bond subscription of \$300,000, on condition Russellville was a point. No formal report has been made of the amount of private stock subscribed, but informal accounts place it above \$100,000. These two sums combined will be sufficient to grade the road. This short link of road, connecting Memphis with Louisville, when graded, cannot fail to secure credit, or be sufficient to invite means sufficient to iron and equip it."

The California Steam Navigation Company have determined to put a steamer on the route from San Diego to the Colorado river. This enterprise will be of great service to San Francisco and add to her trade. It will open a semi-monthly communication with Western Arizona, Lower California, and the Mexican ports on the Gulf.

#### SUNBURY AND ERIE R. R.

S. V. Merrick, Esq., the former President of this Company has resigned his position and the directors have elected W. G. Moorehead, Esq. to succeed him. In his letter of resignation Mr. Merrick says:

At an early day, large contracts were entered into for the construction of the work, covering a space of about one hundred and twenty-five miles from Williamsport westward, payable partly in stock; but without any adequate means to meet the cash payments. These contracts have languished for nearly two years and have always been looked upon as an incubus upon the company. Viewed in this light it became an object of interest to relieve the company from obligations which could not be fulfilled.

After free interchanges of views between the contractors and committee of your body, these contracts have been annulled on terms, it is believed, of mutual advantage, and the company is now free from all contracts for work east of the mountains.

On the Western division the contractors have not stopped the work, even at the present time of financial depression, but have continued with indomitable energy, during a period when assistance from the Treasury could not be granted, depending upon funds raised on the line of the road.

The importance of pressing this division, as well as the Farnsrdsville section, at an early day, can not be overlooked, as upon them hinge the final completion of the whole line.

The Western division of the road now presents fair prospects for an early completion. About one-third of the distance under contract is graded, and the contractors are pushing the work with vigor. Besides the credit which the road will be entitled to, subscriptions in land to the stock of the company have been made to a large amount—more than fifty thousand acres having been offered, mostly valuable coal and timber lands, which, it is believed, when added to the road bed, will afford a basis for security ample to ensure the construction of this link, and open the vast coal fields of Elk, and the adjoining counties, to the western market.

With considerable debt remaining unpaid, which was secured by collaterals in the hands of the treasurer, this company was overtaken by the money panic, which, for the time, prostrated a part of their assets, and compelled the company to lay over such notes as were not covered by collaterals immediately available. Some of them have since been disposed of and it is expected that the whole soon will be, and the company be disembarassed without much resort to their own bonds.

The bonds of the company heretofore created were based upon a mortgage for six millions of dollars upon the whole line of road, finished and unfinished. These bonds did not present a security with which capitalists were satisfied, and hence they have been wholly unsaleable. Believing that the sale of part of the bonds would be necessary to enable the company to meet its engagements, the old bonds and mortgage have been cancelled, and the bonds issued called in. A new mortgage has been executed upon the finished portion of the road, from Sunbury to Williamsport, for one million of dollars. The bonds under this mortgage present a security as reliable as any railroad security

in the market, as the revenues are ample to pay the interest punctually, and will, doubtless, when put upon the market, command as high rate as any security of the kind.

The field is now open for an energetic prosecution of the work as soon as the returning tide of prosperity shall have fairly set in upon the commerce of the country, and I may indulge the hope that a brighter day may soon dawn on the Sunbury and Erie Rail Road.

Mr. Merrick still retains his place as a director of the company.

#### STOCK SUBSCRIPTIONS.

The following decision on the liability of subscribers to the stock of companies for instalments due is taken from the report of the *Commercial Journal*.

James S. Craft and G. P. Hamilton, Esqs., were counsel for plaintiffs, and Messrs. Loomis and Shinn for defendants.

The Pittsburgh and Steubenville Railroad Company vs. Thomas S. Clarke and William Thaw. Lewis, Chief Justice. Error to the District Court of Allegheny County.

This is an action to recover the instalments due on a subscription to the stock of the Pittsburgh and Steubenville Railroad Company. The plea of payment admits the original liability of the defendants, but the defence is that eighty shares of the number originally subscribed were transferred to Edwin M. Stanton, on the 25th May, 1852. It is not necessary, in this case, to decide the general question whether a transfer of stock will relieve an original subscriber from his express engagement to pay the instalments when required by the directors. Our duty will be performed when we give a construction to the 7th section of the act of 10th February, 1849. That section directs certificates to be delivered to the persons entitled to receive them, "which evidences of stock shall be transferable, at the pleasure of the holder, in a suitable book to be kept by the Company for that purpose, in the presence of the President or Treasurer, subject however, to all payments due or to become due thereon; and the assignee or party to whom the same shall have been so transferred, shall thereupon be a member of said corporation; and have and enjoy all the immunities, privileges and franchises, and be subject to all the liabilities, conditions and penalties incident thereto in the same manner as the original subscriber would have been: *Provided*, That no certificate shall be transferred so long as the holder thereof is indebted to said Company, unless the Board of Directors shall consent thereto, and provided that no such transfer of stock shall have the effect of discharging any liabilities or penalties theretofore incurred by the owner thereof." Taking these two provisos together, they very plainly declare that a stockholder, who is "indebted" to the Company shall not transfer his stock without the "consent" of the "Board of Directors," and that such transfer, even with the consent of the Board, shall not discharge "any liabilities" or penalties theretofore incurred by the owner thereof. Is an original subscriber who has bound himself in writing to pay fifty dollars per share, but who has only paid five dollars per share on his subscription, "indebted," to the Company within the meaning of the act? Why should this question receive a negative answer? His engagement to pay money is as much a debt as any other engagement for the payment of money. A



debt may be contracted for stock in a Railroad Company as readily as for anything else. It is true that the debt is payable by instalments when required from time to time by the Directors. But it is none the less a debt on that account. It is *debitum in presenti solvendum in futuro*. It is a present debt payable at some future day. It is well settled that the lien given by statute to a corporation upon the shares of stockholders "indebted" to it, extends to all debts, whether payable presently or at a future time, except where the statute limits the lien to debts actually due and payable, and that a stockholder indebted to the corporation, although the debt may not be due, can not transfer his stock without the consent of the corporation. *Rogers vs. Huntington*, 12 S. & R. 77; *Grant vs. Mechanics' Bank of Philadelphia*, 15 S. & R. 140; *Sewell vs. Lancaster Bank*, 17 S. & R. 285. It is very clear that the defendants, at the time of the alleged transfer of their stock, were "indebted" to the Company to an amount nearly equal to the whole of their subscription. They had, therefore, no right whatever, to transfer their stock without the consent of the Board of Directors. It is true that as between them and the purchaser, if the latter thought proper to contract for a contingent or uncertain interest, the transfer might be good for some purposes. 8 Pick. 90, 9 Pick. 202, 2 Cowen 770. But it passes no title to the stock, and confers no "privileges, immunities or franchises" whatsoever upon the purchaser. The consent of the Board of Directors is of itself the originating act in the change of title, and does not merely operate to perfect the conveyance previously begun. *Marlborough Man. Co. vs. Smith*, 2 Conn. Rep. 579; *Newton vs. Bridgeport Turnpike Co.* 3 Conn. Rep. 544; *Oxford Turnpike Co. vs. Bunnell*, 6 Conn. Rep. 552. So long as the stock remains unpaid, the corporation has a right to refuse to receive new members in place of the original adventurers. Until the stock is fully paid up, and the stockholders otherwise free from debt to the Company, they have no right whatever to introduce strangers into the Company in their places. A right which depends upon the consent of others, is no right at all. The transfer to Mr. Stanton was therefore, of itself, a nullity. An attempt was made to give it vitality by parol evidence, from which the consent of the Board of Directors was to be inferred by the jury. But there is no evidence tending to show that the question was ever presented to the consideration of the Board, or that any action was taken by the Board in regard to the transfer. In ordinary business transactions between a corporation and strangers, the authority of agents and the existence of contracts may be implied from acquiescence and other circumstances. So where the assent of the Board is required by a By-Law only, the execution of the By-Law may be modified by the practice of the corporation. *Ins. Co. vs. Smith*, 1 Jones 126. But when the Act of Incorporation grants a power, the mode prescribed by the statute for its exercise must be strictly pursued. 5 Barb. Sup. Court Rep. 640; 2 Cranch 127. The question here is whether one member of a corporation has been legally substituted for another. The title of the original stockholder was established by written evidence, and could have no legal existence without it. *Thames Tunnel vs. Sheldon*, 6 B. and Cress. 341. The title of the substitute must be shown by evidence of the same character. It is the duty of the Directors to keep minutes of their proceedings,

and the proper evidence of their assent to a transfer is a recorded resolution adopted when the Board was in session. Where the transfer is made by a Director it ought further to appear that the resolution of assent was carried without his vote. If the resolution was adopted and entered on the minutes, the loss or destruction of the entry might be supplied by parol proof. But in no other case can parol evidence be received to show that an assignee has been admitted as a member of the corporation in the place of the assignor. There was no legal evidence of the assent of the Board of Directors to the transfer, and therefore no legal evidence of a valid transfer of the stock. If there had been, we do not see how the defendants can claim to be discharged by it from "liabilities" previously incurred. Their subscription to the stock of the Company created a liability to be called upon for payment in such instalments as the Directors required. Conceding that it was not an obligation for present payment, and supposing, for a moment, that it was not strictly a debt, it was certainly a "liability," which is a word of more extensive significance than "debt." The Act of Assembly is express in its direction that a transfer, even with the assent of the Board, shall not have the effect of discharging any liabilities or penalties heretofore incurred by the owner of the stock. We see no reason for restricting this proviso to "liabilities" which had become due and payable before the transfer. It is sufficient to bring a "liability" within the proviso that it had been "incurred" by the owner before the transfer. It is not necessary that it should also have become due and payable.

The clause which declares that the stock transferred shall be "subject to all payments due or to become due thereon," makes no such discrimination. The object of the legislature was to secure all liabilities, without respect to the time when they would be at maturity; and neither the creation of a lien on the stock transferred, nor the personal liabilities imposed on the assignee, can have the effect of releasing the original subscriber from his express contract to pay the money. It is a familiar principle that a creditor, by taking any number of securities for a pre-existing debt, does not thereby release the original obligation. To produce that effect there must be an agreement to accept the new securities in satisfaction of prior indebtedness. Nothing of that kind can be inferred from the language of the act. The clause which gives to the assignee the advantage, and subjects him to the disadvantages, if a member of the corporation; in the same manner as the original subscriber would have been, was intended to fix the extent of the assignee's liability, and not to limit or release that of the assignor. The words 'would have been,' are, therefore, altogether insufficient, in the connexion in which they stand, to perform the important office of releasing the original subscriber from the contract. Before the transfer he would have been liable to the seizure of his dividends and the forfeiture of his stock, as well as to an action on his contract. By the transfer, the liability was changed so far as regards the lien on his stock, and he remained liable to an action on his contract alone, but the new stockholder is made liable to the lien as well as to the action 'in the same manner as the original subscriber would have been' if he had made no transfer. This is what we understand this part of the section to mean. If, however, the meaning were doubtful, we are very clear that there is nothing in the

language used which should control the clear declaration contained in the last proviso, that 'no such transfer shall have the effect of discharging any liabilities, or penalties therefore incurred by the owner' of stock.

This view of the case renders it unnecessary to inquire into the motives for making the transfer. Whether made in good faith or not, the original subscriber is not hereby released from his contract. As the evidence stands on the paper book, the defendants have no defence whatever, except to the extent of their payments. If the case should wear the same aspect on a second trial, the evidence relative to the other grounds of defence ought to be rejected, and peremptory directions given to the grand jury in favor of the plaintiff.

Decision reversed, and venire facias de novo awarded.

#### RAILROADS AND STEAMBOATS.

The Savannah News in commenting on the importance of a Railroad communication between Savannah and Florida, gives the following list of lines of steamboats engaged in that trade alone during the past five years.

The Magnolia, (blown up) worth .....	\$45,000
The Haight, (burnt) worth .....	35,000
The Seminole, (burnt) worth .....	60,000
The St. Johns, (burnt) worth .....	42,000
The Welaka, (wrecked) worth .....	40,000
	<hr/> \$222,000

"The above is a rough estimate of the loss in boats, not taking into account the loss of cargo, the expense of repairing damages, and other incidental losses."

The estimated cost of the extension of the Savannah, Albany and Gulf R. R. to Fernandina is \$605,000.

We shall add no comments to the bare facts given above. They speak for themselves.

#### SACRAMENTO VALLEY R. R., CALIFORNIA.

J. P. Robinson, Esq., Superintendent of the Sacramento Valley Railroad, submitted this morning, his annual report for the fiscal year, ending Sept. 30th. It is gotten up in very thorough style, and exhibits at a glance the complete business of the road which is in a remarkable flourishing condition, and gives assurance that it has been very economically conducted. The following is a condensed statement of the affairs of the corporation:

Total number of passengers transported for the year over the Sacramento Valley Railroad between Sacramento and Folsom .....	82,432
Miles traveled by this number .....	1,600,000

#### TOTAL RECEIPTS.

From Passenger earnings .....	\$126,416 48
" Freight .....	51,425 63
Total .....	\$177,842 11

#### TOTAL EXPENDITURES.

For current expenses of operations and maintenance for one year .....	\$86,503 4
Earnings over expenses .....	91,338 63
Additional Construction .....	21,566 90
Nett return .....	69,771 72
CURRENT EXPENSES FOR THE YEAR, ENDING SEPT. 30TH.	
Office expenses .....	\$ 728.10
Depot .....	1,665.01
Bridge repairs .....	550.61
Engine .....	6,059 50
Building and fixtures .....	1,304 60
Car and furniture .....	4,857 03
Track .....	11,013 45
Salaries .....	13,926 62
Passenger Trains .....	11,019 75
Freight .....	17,751 94
Fuel consumption .....	7,408 33
Oil .....	505 00

Cost of maintenance and running .....



Showing the nett earnings over the cost of maintenance and running	
To be .....	\$100,984 07
Tax expenses .....	\$ 6,275 27
Reclamation expenses .....	442 84
Legal .....	1,950 00
Road and street repairs .....	938 00
Total current expenses .....	86,503 48
Nett earnings over total of current expenses .....	91,338 63
Total of salaries paid officers and men .....	55,000 00

Number of officers and employeos .....	38
Length of main track .....	22 25-100 miles.
Length of side track .....	1 67-100 "

#### Exhibit of Machinery and Rolling Stock:

Passenger Engines .....	2
Freight .....	2
Cars, (60 passenger) .....	6
" (freight platform) .....	25
" (freight box) .....	25
" (baggage) .....	2
" (hand) .....	5
" (truck) .....	2
with duplicate machinery, sufficient for about three years use.	

#### Total cost per ton transported, and per mile run, of Engines, Passengers and Freight:

Cost per ton .....	\$2 83 9-10
Cost per mile .....	\$1 58 3-10

#### Total of the earnings of each train up and down:

Morning train up .....	\$2,846 93
" down .....	15,363 90
Sunday 10 o'clock train up .....	1,815 63
Noon train down .....	70,743 35
Afternoon train up .....	20,991 21
" down .....	13,603 41
Excursion trains .....	1,052 00
Total .....	\$126,416 48

It will be remembered that the morning trains down and afternoon trains up, are entirely local, as between Sacramento and Folsom, and show that the actual amount received from passengers between those points is \$36,355 11.

The number of through or stage passengers transported during the year was 29,500, while the number of local passengers, or those who did not go beyond Folsom, was 49,200—which is an exceedingly interesting fact as showing the immense amount of travel between one section of this country, the greater portion of which has been created by the railroad.

Number of days labor, and total amount paid for same on repairs:

Days .....	5,478   Amount .....	\$17,419 79
Statement of accidents for the year ending September 30th, 1857:		

From passenger trains .....	5 animals.
" Freight .....	7 "

No lives were lost during the year, nor did any accident occur to the trains. Four platform cars were burned—loss \$1,000.

Summary of miles run of all engines and consumption of wood, oil, water and waste, for the year ending Sept. 30th, 1857:

Number of miles run .....	54,300
Cords of wood consumed .....	1,750
Gallons of oil .....	350
Gallons of water .....	1,150,000
Pounds of waste .....	450

Tons of merchandise transported up .....	12,227
" freight " down .....	12,217
Total .....	24,446

Tons of Granite transported down .....	1,813
" Cobble .....	2,866
" Merchandiso " .....	836
Cords of wood .....	4,469

The total number of passengers transported free, including stage agents, teamsters, employees, etc., was 6,000, of which number 1,000 traveled by courtesy—as charity cases, complimentary, etc.

The above is a very full and we think highly satisfactory showing of the condition of the Sacramento Valley Railroad, and will doubtless be read with great interest by our readers.—*The Daily Bee, Sacramento, Cal.*

## RAILWAYS OF THE UNITED KINGDOM IN 1856.

Captain Galton's Report to the Lords of the Committee of Privy Council for Trade and Foreign Plantations of the Proceedings of the Department relating to Railways, for the Year 1856.

Railway Department, Board of Trade, Whitehall, July 21, 1857.

My Lords,—I have the honor to lay before you the following report upon the subjects which have come under the cognizance of this department, during the year 1856.

#### RAILWAY LEGISLATION.

The number of railway bills which came before Parliament in the session of 1856 amounted to 91, and the length of new line proposed to be authorised amounted to 676 miles. But of these bills only 59 were passed; and the total length of line actually authorised was 322 miles.

The following table shows the number of railway acts passed in each session since 1846, together with the length of new lines and amount of capital and loans authorised by those acts:—

Year.	Number of railway acts.	Length of line authorised. Miles.	Amount of money authorised to be raised. £
1846 .....	270	4538	132,617,368
1847 .....	190	3354	39,460,124
1848 .....	85	371	13,274,237
1849 .....	34	1	3,911,331
1850 .....	34	8	4,115,632
1851 .....	61	135	9,553,275
1852 .....	51	244	4,533,834
1853 .....	106	940	15,517,601
1854 .....	71	482	9,211,602
1855 .....	73	363	9,192,038
1856 .....	59	322	5,784,426

Of the 59 acts passed in 1856, 38 had reference to the construction of works. The length of new line authorised by these 38 acts was as follows, viz., 214 in England and Wales, 106 miles in Scotland, and about 2 miles in Ireland.

The lines authorised in England and Wales were chiefly extensions or branches connected with railways already authorised. The most important were the following, viz.:

The London and South Western railway extension from Yeovil to Exeter, which, with the Salisbury and Yeovil railway previously authorised, will complete the narrow gauge between the Metropolis and Exeter.

The Dorset Central Railway, which will connect the London and South Western Railway Company's Dorchester line with the town of Blandford, and will form a link in the communication between the south and west of England; a scheme for an extension of this line to Bruton has been submitted to Parliament during the present session.

The Somerset Central extension railway from Glastonbury to Bruton, which will connect Weymouth with the Bristol Channel, by means of the Wilts, Somerset, and Weymouth line of the Great Western railway.

The Shrewsbury and Welchpool railway, which will connect Birmingham and Shrewsbury with the Oswestry and Newtown railway, and with central Wales.

The Lowestoft and Becoles railway, and the Yarmouth and Haddiscoe railway, which will connect the towus of Yarmouth and Lowestoft with the East Suffolk and the Waveney Valley railways, and will form more direct lines of communication between Yarmouth and the south.

The Stockton and Darlington and Newcastle and Carlisle Union railway, which will connect

the Stockton and Darlington railway with the Newcastle and Carlisle and the Border Counties railways; a scheme for the extension of this latter line to join the North British railway at Hawick is now before Parliament.

In Scotland;—The Castle Douglas and Dumfries railway, which will connect the Caledonian railway with Castle Douglas, and will form part of the line proposed to unite Carlisle with Port Patrick.

The Inverness and Aberdeen junction, from Nairn to Keith, which will, when opened, complete the communication with Inverness.

Several short branch railways in Scotland also received the sanction of Parliament.

In Ireland, no line of any importance was authorised by Parliament.

The other provisions in the several acts passed in the session of 1856 which are chiefly deserving of notice, are as follows, viz.:

Two acts authorised the sale or lease of railways.

Ten acts were passed authorising one railway Company to subscribe towards the undertaking of another Company; these subscriptions were chiefly in aid of small undertakings in connection with important railways, and in five cases the subscribing Companies were authorised to raise shares for the subscription by means of a preferential dividend.

Twenty-two acts authorised Companies to enter into working and traffic arrangements with other Companies. The duration of these agreements is generally limited to ten years, subject to the approval of Shareholders and of the Board of Trade, a power of renewal, at the expiration of the period, being reserved.

One act empowered the London and North Western Railway Company to use the station and a portion of line at Shrewsbury, and another act empowered the Shrewsbury and Welchpool Railway Company to use the Shrewsbury and Hereford railway; and the Epsom and Leatherhead Company also were authorised to effect a junction with and to use the Brighton line.

Twelve acts were passed which authorised an extension of time; of these may be noticed the Oxford, Worcester and Wolverhampton railway act, which extended the period for the completion of this railway with a double line of rails on the broad gauge for four years.

Fifteen acts authorised the issue of preference shares or the creation of a debenture stock.

The cases in which power has been conferred upon your Lordships in the special acts of last session are 42 in number, and a summary of the clauses in which these powers are contained will be found in the appendix.

The number of level crossings proposed by the bills which became acts amounted to 163, and of these 93 level crossings were authorised.

#### DEVELOPMENT OF RAILWAY COMMUNICATION.

The total length of line authorised by Parliament, down to the end of 1856, amounted to 14,668 miles, but of this, 1,495 miles have been abandoned by subsequent acts, or by warrants under the authority of the late board of Commissioners of railways, and consequently there remain 13,173 miles, for which the parliamentary powers which were obtained have not been repealed; of these 8,635 miles were open at the end of 1856, and 4,538 miles which have received the authority of Parliament remain to be opened.

This length of line is distributed throughout the United Kingdom, as follows:—

	Length of line open on 31st Dec., 1855.	Length of line opened during 1856.	Length of line open on 31st Dec., 1856.	Length of line authorised, but not open, on 31st Dec., 1856.	Total length of line authorised by Parliament to 31st Dec., 1856.
	Miles.	Miles.	Miles.	Miles.	Miles.
England & Wales .....	6210	174	6384	3316	9700
Scotland .....	1083	112	1195	452	1647
Ireland .....	987	69	1056	770	1826
Total .....	8280	355	8635	4538	13,173



and the following table exhibits for each year since 1843, the proportions of railway authorised, opened, and abandoned, under the authority of Parliament:—

Table showing the length of railway authorised previous to the end of 1843 and in each succeeding year, opened for traffic during each year, and the proportions remaining to be com-

pleted at the end of 1856; also showing the total length of railway opened for traffic during each year since 1843.

	Length of Line opened.													Total length of line opened to December, 1856.	Length of line authorised at the end of 1843, and during each subsequent year.	Decrease by abandonment, deviation, &c., under authority of subsequent acts.	Length of line after reduction made in consequence of abandonment, &c., under the authority of acts passed subsequently to 1843.	Length of line remaining to be made.
	Previously to December, 1843.	During 1844.	During 1845.	During 1846.	During 1847.	During 1848.	During 1849.	During 1850.	During 1851.	During 1852.	During 1853.	During 1854.	During 1855.	During 1856.				
Of lines authorised previously to Dec. 1843	Miles. 2036	Miles. 204	Miles. 131	Miles. 16	Miles. 2	Miles. 1	Miles. 3	Miles. 4	Miles. 65	Miles. 106	Miles. 132	Miles. 50	Miles. 26	Miles. 45	Miles. 2390	Miles. 2390	Miles. 2390	Miles. 2390
1844	..	..	..	..	..	..	..	..	..	..	..	..	..	..	792	805	805	13
1845	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2345	2700	2644	299
1846	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2110	453	3549	1439
1847	..	..	..	..	..	..	..	..	..	..	..	..	..	..	292	1354	916	624
1848	..	..	..	..	..	..	..	..	..	..	..	..	..	..	48	371	364	316
1849	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	16	16	13
1850	..	..	..	..	..	..	..	..	..	..	..	..	..	..	7	8	8	1
1851	..	..	..	..	..	..	..	..	..	..	..	..	..	..	77	135	135	58
1852	..	..	..	..	..	..	..	..	..	..	..	..	..	..	188	244	242	54
1853	..	..	..	..	..	..	..	..	..	..	..	..	..	..	284	940	939	655
1854	..	..	..	..	..	..	..	..	..	..	..	..	..	..	35	58	480	422
1855	..	..	..	..	..	..	..	..	..	..	..	..	..	..	41	363	363	322
1856	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	332	322	322
Total	2036	204	296	606	803	1182	869	625	269	446	350	368	226	355	8635	14,668	1495	4538
Railways opened for passenger traffic belonging to private individuals, and Companies, but which have not received parliamentary sanction	..	..	..	..	..	..	..	..	..	..	..	..	..	..	17	11	28	..
Railways not previously included and which are at present only used for mineral traffic	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	55	55	..
Total	..	..	..	..	..	..	..	..	..	..	..	..	..	..	243	421	8718	..

With respect to 2,353 miles, out of the 4,538 miles for which parliamentary powers have been obtained, and which have not yet been opened, the powers for the compulsory purchase of the land and the completion of the works have expired. The proportion in which this is distributed through the several years is shown in the following table:—

Table showing the proportion of railway not open for traffic authorised previous to the end of 1843, and in each subsequent year, and which have not been abandoned by subsequent acts; and the proportion as to which the time allowed for the compulsory purchase of land and for the completion of works has expired, without the railways being completed down to the end of 1856.

	Length of line authorised and not abandoned by subsequent acts, which was not opened for traffic on the 31st December, 1856.		Length of line upon which the powers for the compulsory purchase of land and completion of works had expired, and the railway being opened on 31st December, 1856.	Railways, for the construction of which parliamentary powers exist.
	Miles.	Miles.		
Of lines authorised previous to December, 1843	Nil.	..	..	..
1844	13	13	..	..
1845	229	253	46	..
1846	1439	1148	291	..
1847	624	540	84	..
1848	316	305	11	..
1849	13	13	..	..
1850	1	..	1	..
1851	58	6	52	..
1852	54	..	54	..
1853	655	75	580	..
1854	422	..	422	..
1855	322	..	322	..
1856	322	..	322	..
Total	4538	2353	2185	..

Upon 179 miles out of the 2,185 miles, for the construction of which parliamentary powers exist, the powers for the compulsory purchase of the land have been allowed to expire with-

out having been exercised, and this increases, therefore, the number of miles which it is not probable will ever be made, to 2,532 miles.

The total amount of money authorised to be raised by railway Companies by shares and on loan, to the end of 1856, amounted to £377,767,907, of which £308,775,894 had been raised, leaving £68,992,013 to be raised. There are no means of ascertaining how much of this sum is apportioned to the miles of railway for which the parliamentary powers have expired.

Of the 8,718 miles open for traffic on the 31st December, 1856, the proportion constructed on the narrow gauge, broad gauge, mixed gauge, and Irish gauge, is as follows:—

	Narrow gauge.	Broad gauge.	Mixed gauge.	Irish gauge.	Total.
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
In England..	5508	679	254	..	6441
In Scotland..	1231	..	..	..	1231
In Ireland...	8	..	..	1048	1056
Total.....	6737	679	254	1048	8718

And by the following table is shown the length of single lines open for traffic at the same dates:—

	Number of Companies having single line.	Narrow gauge.	Broad gauge.	Mixed gauge.	Irish gauge.	Total.
Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
In England..	94	1193	240	72*	..	1510
In Scotland..	28	364	..	..	..	364
In Ireland...	24	..	..	..	637	637
Total.....	146	1562	240	72	637	2511

\* Thirty-nine miles of this length is laid with a second line on the narrow gauge.

From the above details it appears that the length of new lines opened for traffic during the year 1856 amounted to 421 miles, including 66 miles of line opened but not previously included in the published tables; of these, 346 miles were laid with only one line of rails.

Of the lines opened in 1856, the following are those which appear to be the most important, viz.:—

The portions of the Wilts, Somerset, and Weymouth line of the Great Western railway

between Warminster and Salisbury, and between Frome and Yeovil, which are constructed on the broad gauge; the latter of these lines will shortly be completed to Dorchester.

The Maidstone branch of the South Eastern railway, which connects the North Kent railway at Strood with Maidstone.

The Staines, Wokingham, and Woking railway between Staines and Wokingham.

A portion of the West end of London and Crystal Palace railway.

The South Wales railway between Haverfordwest and Neyland, by which means the railway communication is completed between the metropolis and Milford Haven.

The Carlisle and Silloth Bay railway, and the Darlington and Barnard Castle railway.

The remaining lines were short branch lines or extensions of existing lines. Of these may be mentioned:—

The Woodford and Loughton branch of the Eastern counties railway; the Caterham railway; the Dursley and Midland Junction railway; the Uxbridge railway; the Stamford and Essendine railway; the Guildersome branch of the Leeds, Bradford, and Halifax Junction railway; and the Oldham branch of the London and North Western railway.

In Scotland the Forth and Clyde Junction railway was opened for traffic, by means of which Stirling and the east coast of Scotland is connected with the Clyde.

The Great North of Scotland railway was extended from Huntley to Keith, and the following important branch lines or short lines of railway were also opened, viz.:—

The Ayr and Dalmellington railway, the Ayr and Maybole railway, the Crief Junction railway, the Perth and Dunkeld railway, the Selkirk and Galashiels railway, the extension of the Monkland railways to Borrowstowness and to Bathgate, the Inverury and Old Meldrum railway, and the Jedburgh railway.

In Ireland, the most important lines opened were the Cavan branch of the Midland Great Western railway, the extension to Cookstown of the Belfast and Ballymena railway, and a portion of the Limerick and Foynes railway between Limerick and Rathkale.

[TO BE CONTINUED.]



## MONETARY AND COMMERCIAL.

The past week has been actively occupied by most persons in preparing for the January settlements as they come due. General business is dull; collections are difficult to make, and there is but little capital seeking investment in the shape of mercantile paper. There is, however, greater confidence felt in those who have thus far stood the shock. The payment of taxes, which has been going on for the past thirty days, is over, and has been generally met with promptness, and less effort than it was supposed would have to be put forth. Some of this has found its way into the banks, and will be partially put into circulation during the coming sixty days.

The river is in a fair navigable condition, and were it not for the dullness of general business, we should consider ourselves fortunate in having a fair stage of water so early in the season.

Prices of all the leading staples are much lower than last year at this time.

Sales of stocks are nominal. There is no surplus money seeking investment in this way. While transactions that do occur are rather compulsory than voluntary. The owners are forced to sell by their necessities, and the prices obtained can be regarded as no criterion of the standing of the securities. The same remarks will apply equally to real estate, a few transactions which have come under our notice, have been at strictly panic prices.

In New York we notice a continuance of the favorable state of things noted in our last. The resumption of specie payments by the banks was not premature as many predicted.

The following is an exhibit of the number of Banks and their capitals, that are now paying specie:

States.	Number.	Capital.
Maine.....	76	\$3,135,000
New Hampshire.....	49	4,839,000
Vermont.....	41	3,857,000
Massachusetts.....	172	58,600,000
Connecticut.....	70	19,000,000
New York.....	310	98,000,000
New Jersey.....	46	6,600,000
Virginia, half.....	39	7,000,000
Louisiana.....	10	21,700,000
Kentucky.....	35	10,600,000
Ohio.....	61	6,800,000
Indiana.....	46	5,000,000
Total specie paying.....	953	\$249,831,000
Total non-specie paying.....	465	121,169,000
Aggregate.....	1420	\$371,000,000

Rates of interest are declining. There was a slightly downward tendency in stocks toward the close of the week, arising from dullness in the markets, and the abstraction of attention to the yearly settlements.

**WM. P. CHAPPELL,**  
MANUFACTURER OF  
**ENGINEERS' OIL**  
FOR LOCOMOTIVES,  
HEAD LIGHT, CYLINDER  
AND CAR OILS,  
BURNING FLUID, & C.,  
No. 15 East Front Street, Cincinnati, O.

## References.

Little Miami & Cincinnati & Xenia Railroad,  
Ohio & Mississippi Railroad,  
Cincinnati, Hamilton & Dayton Railroad,  
Indianapolis & Cincinnati Railroad,  
Kentucky Central Railroad,  
Mad River & Lake Erie Railroad,  
Central Ohio Railroad,  
Cleveland, Columbus & Cincinnati Railroad,  
Illinois Central Railroad,  
Chicago & Rock Island Railroad,  
Louisville & Frankfort Railroad,  
Nashville & Chattanooga Railroad,  
Southern Railroad,  
Mississippi & Tennessee Railroad,  
New Orleans, Jackson & Great Northern R. R.  
New Orleans, Opelousas & Great Western R. R.  
Orders promptly filled at lowest figures,  
for Paints, Linseed Oil, Spirits Turpentine, and  
Varnishes.

## FUR TRADE IN MINNESOTA.

The Saint Paul Advertiser gives the following summary of the fur trade of Minnesota for the year 1857.

64,292 Rats.....	\$11,572 50
8,276 Minks.....	18,621 00
1,428 Martins.....	3,570 00
1,045 Fishers.....	4,702 50
876 Red Foxes.....	1,095 00
3,400 Raccoons.....	2,550 00
10 Wolverines.....	25 00
364 Badgers.....	91 00
2,032 Wolves.....	3,048 00
405 Otters.....	1,417 50
556 Beaver (lbs.).....	822 00
2,542 Kitfoxes.....	1,271 00
610 Bears.....	6,700 00
20 Cross Foxes.....	100 00
8 Silver Foxes.....	400 00
50 Lynxes.....	125 00
7,500 Robes.....	41,200 00
Total.....	\$96,750 59

A company has been formed to build a railroad from San Francisco to Marysville, California.

## Reliable Books for Travelers.

## DINSMORE'S

## R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains Official Time Tables with References; Combined Railroad Routes; Steam Navigation; Gazetteer. Price 25 cents, with Large Map

DINSMORE'S THIRTY MILES AROUND N. YORK, By Railroad, Steamboat, Stage, Express and Telegraph; or how to get in and out of the Metropolis. An alphabetical list of 1000 places. Price 12 cents.

## TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Funk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents. DINSMORE & CO., 9 Spruce street, New York

## INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.

**INDIANAPOLIS AND CINCINNATI  
SHORT LINE RAILROAD  
VIA LAWRENCEBURGH.**  
Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

**THREE PASSENGER TRAINS!**  
Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

**FIRST TRAIN, 6.20 A. M.**  
CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.  
**SECOND TRAIN, 3.00 P. M.**  
ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

**THIRD TRAIN, 5.50 P. M.**  
NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towos and Cities in the West.

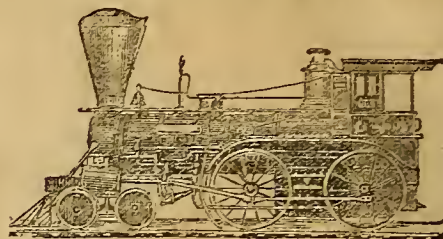
Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

## VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Specer House, corner Broadway & Front, where all necessary Information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.  
W. H. L. NOBLE, Gen'l Ticket Agent.

CINCINNATI  
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

## BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Cast Iron, and Signal Lanterns.

**Cotton Duck for Cr Covering,**  
Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimings for windows and Seats. Varioish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

## Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES.

Late Davenport & Bridges, Car Manufacturers. Cambridgeport, Mass.

ALFRED BRIDGES.

Late Davenport, Bridges & Co., Fitchburg, Mass. fcc6.

## GEO. D. WINCHELL &amp; BRO.,

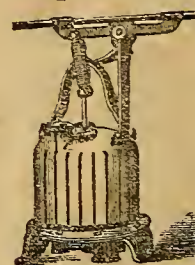
172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action  
**SUCTION & FORCE PUMP**

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturers, Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

Gold L. (The highest prize) awarded at the Ohio Mechanics' Institute. June 18, 1855 F1



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds.	Name of Company.	Quot of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp sr	173	173	5,000,000.00				
498,800	6			1802-3	2d	.....	Androsco'g'n & Kennebec	54.55	54.55	1,400,000.00		209,475.46	110,246.98	nono.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange..	86.5	86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,416	6			now	"	.....	B'ng'r, Old T. & Milford..	12.5	12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53
500,000	6			1860	"	.....	Boston & Worcester..	44 5-8	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m
500,000	7		N. Y.	1866	1st mortgage.	.....	Buffalo & State Line..			1,200,000.00				5 pr. ct. 6m.
300,000	7			1857-9-62	Income.	.....	"							
200,000	7			1864	Domestic.	.....	"							
577,127	6			1872	4th mortgage.	.....	Central Ohio..							
192,200	7			1874	1st mortgage.	.....	Champl'n & St. Lawr'nce	43	43	1,872,800.00	1,001,087.00	168,200.00	77,700.00	10 per ct.
280,000	7				2d	.....	"							
1,440,000	7				Domestic.	.....	Ch'r'l'te & South Carolina.	110	110	1,730,000.00	380,000.00	291,219.86	47 per c't.	\$72,300
1,300,000	6-7-8		N. Y.		1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	138	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.33	15 pr. ct. 6m
374,000	8				2d	.....	"							
					Convertible.	.....	"							
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa..	131	131	1,761,149.16	2,241,500.00	221,491.96		
532,000					2d	.....	Cin. Wil'ng'n & Zanes'ville							
104,000					3d	.....	"							
305,500					"	.....	"							
540,000	6				Income.	.....	"							
43,000	7			1873	Convertible.	.....	Cleveland Col. & Cin.	139	139	4,741,320		1 3 754	700,804	6 per cent.
400,000	7			1864	1st mortgage.	.....	Cleveland & Mahoning..	85	85	1,500,000.00				
					2d	.....	"							
0,000,000	7			1873		.....	Cumberland Valley.....	52	52	1,218,300.00		160,511.66	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	52	52	1,000,000.00	1,000,000.00			
350,000						.....	Eastern Railroad..	93 6-10	93 6-10	3,345,300.00		665,578.79	288,077.84	\$234,133
740,000	7				1st mortgage.	.....	East Ten. & Virginia..	130	130	625,450.00		30,897.30	19,692.30	
88,000	10			1869	1st	.....	Essex Railroad..	20	20	700,000.00				
400,000	7			1861	2d	.....	Evansville & Crawpd'vie	109	109	2,222,657.00		243,970.42	136,061.80	\$133,281.45
200,000	10			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,637.81	3 pr. cent.
						.....	Fox River Valley..	33	33	800,000.00				
100,000	6					.....	Fair Haven Branch..	15	15	300,000.00		50,381.23	14,222.45	\$166,240.00
100,000	6				1st mortgage.	.....	Georgia RR & Banking Co.	233	233	4,156,000.00		1,068,912.54	357,659.42	\$166,240.00
300,000	7				1st	.....	G't Falls & Conway R.R.	20	20			27,376.69	14,207.07	
4,000,000	6 1-9			1858	1st	.....	G't West'n R.R. of Can.	281 1/2	281 1/2	4,191,550.00		2,068,836.00	176,529.98	8 pr. ct.
2,000,000	7			1869-76	1st	.....	Housatonic Railroad..	74	74	2,000,000.00		339,196.50		
1,812,000	7			1860	2d	.....	Hudson River..	144	144	4,000,000.00		1,924,362.44	718,037.40	
12,885,000	7			1875	3d mortgage.	.....	"	144	144	4,000,000.00				
4,115,000	6			1875	1st	.....	Illinois Central R. R..	704	704	18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.
3,000,000	7			1860	Freeland.	.....	"	704	704	3,558,376.00				3 pr. ct.
600,000	7	Nov. 1.			1st mortgage.	.....	Indiana Central.....	72 1/2	72 1/2			351,871.00		
700,000	7	Jan. & July 1			2d	.....	"							
50,000	7			1862	1st	.....	"							
700,000	7				1st mortgage.	.....	Iron R. R..	13	13	123,700.00				
						.....	Kentucky Con. 2d Div.			719,500.00				
						.....	Knoxville & Kentucky.	32	32			23,233.59	14,233.59	
						.....	Laurens (S. C.) R. R..	184	184	166,000.00				
						.....	Louisville & Nashville.	12 35-	12 35-	300,000.00		50,834.71	14,149.13	\$8,000
218,000	7				1st	.....	Lowell & Lawrence..			2,697,090.00		587,236.57		10 pr. ct.
1,000,000	7			1866	2d	.....	Mad River & Lake Erie..			2,697,090.00				
1,000,000	7			1875	3d	.....	"			2,697,090.00				
2,000,000	6				1st	.....	"			2,697,090.00				
2,500,000	7			1868	1st	.....	Manchester & Lawrence.	26	26	1,000,000.00				\$24,000
2,000,000	7			1874	2d	.....	Marletta & Cincinnati..							
60,000	7 and 8			1867	1st	.....	"							
420,000	8				1st mortgage.	.....	Mexican Gulf R. R..	27	27					
320,000	8			1881	1st	.....	Milwaukee & Horicon..	30	30					
320,000	8			1-68	2d	.....	Mineral Point R. R..	32	32					
6,000,000	6			1884	1st	.....	"	32	32					
						.....	Mobile & Ohio.....	497	497	10,000,000.00		251,498.96	162,802.24	
500,000	7			1869	1st mortgage.	.....	Nashua & Lowell R. R..	15	15	600,000.00		194,752.42	55,501.74	7 pr. ct.
8,356,000	7	May & Nov.	N. York			.....	Now Haven & Northm'tn	55	55	922,500.00				2 pr. ct. 6m
32,892,600	6	June & Dec.	N. York	1864	Con. till 1859.	.....	New York Central..	555	555	23,067,400	14,763,897	7,707,348	3,609,481	3 pr. ct. 6m
0,000,000	7			1873	1st mortgage.	.....	"							
936,000	7			1864	2d	.....	N. Y. & Harlem R. R..	133	133	6,717,100.00		1,040,293.26	64,678.71	\$37,692.30
411,700	6			1863	1st	.....	" Pref.	50	50	1,58,000,000.00		245,713.00	51,544.40	
500,000	7				1st	.....	N. Y. Prov. & Boston..	66	66	1,700,000.00		120,571.50		
300,000	6				2d	.....	N. Lon. Willim'tu & Pal.							\$25,000
						.....	"							
						.....	Pontchartrain R. R..	5	5	500,000.00				
1,500,000	6			1873	1st mortgage.	.....	N. O. Opel'o's & Gr L West.	62 1/2	62 1/2	5,000,000.00		116,795.00	366,118.80	7 pr. ct.
1,000,000	6			1873	2d	.....	N. Y. & New Haven....	103 1/2	103 1/2	3,000,000.00		1,007,666.48		
2,000,000	6			1-85	3d	.....	North Western Va. R. R.							
1,500,000	7			1859	1st mortgage.	.....	"							7 pr. ct.
3,600,000	7					.....	"							
419,500	5			1877		.....	Northern (N. Y.) R. R..	118	118	2,000,000.00		600,000.00		
221,800	6			1860		.....	North Missouri R. R..	19 1/2	19 1/2			25,176.74	88,458.56	2 1/2 pr. ct.
						.....	Norwich & Worcester RR	60	60	2,111,500.00		304,236.33		
						.....	"							
400,000	6			1866	1st mortgage.	.....	Ogd'sb'g, Clay'tn & Rome	94	94			289,690.10	137,875.93	5 pr. ct.
1,200,000	6			1876	2d mortgage.	.....	Ontario, Simcoe & Huron	83 3-	83 3-	2,967,500.00		276,339.02		
300,000	7			1863	1st mortgage.	.....	Orange & Alexandria R.R.							
200,000	8			1873	1st	.....	"							
						.....	Peoria & Bureau Val. R. R.	47	47	1,500,000.00				6 pr. ct.
350,000	6			1861	1st mortgage.	.....	"							
800,000	7			1864 to 1874	1st	.....	Philadelphia & Trenton..	28 1-5	28 1-5	1,000,000.00				
						.....	Portsmouth & Concord.	47	47					
1,260,000	6			20 years.	1st mortgage.	.....	Potomac & Watertown..	76	76	2,000,000.00				
						.....	Rutland & Washington..	62 1/2	62 1/2	950,000.00		68,525.42		
</														
</														



# GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

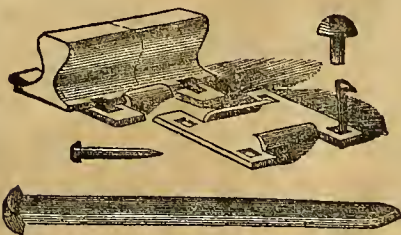
**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**GREAT WESTERN**  
**Railroad Chair and Spike Works**



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of **Wrought Chairs, Hook and Flat Head Railroad Spikes** of all patterns, **Boiler Rivets, Bolts** of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of Iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.  
feb 28 CORBY, GOSSIN & CO.

**Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.**

VIA LAWRENCEBURG.

IN connection with the **Ohio and Mississippi Railroad**. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [jan1-ty] Agent.

**APPLEGATE & CO.,**  
Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, O.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
**JAMES H. MORLEY, New York City.**  
Or **SUMNER SMALL, Boston, Mass.**

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,**

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

**CHARLES ELLET, Jr., Civil Engineer.**  
No. 289 H Street, Washington, D. C. apr12

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
**W. G. HYNDMAN,**  
ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**

**Mechanical Engineer,**

AND

**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

**THEODORE DEHON.**

feb5-1f 10 Wall st., near Broadway, New York.

**ALLEN & NOYES'**  
**METALLIC PACKING.**

**To Whom it May Concern.**

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jr23-1m

**D. M. CARHART,**  
**TURN-TABLE BUILDER.**

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,  
Respectfully Yours,

**D. M. CARHART,**  
Box 1831, Cleveland, Ohio.

oct29-6m

**T. F. RANDOLPH & BRO.**  
**Mathematical Instrument Makers,**

**N. W. Cor. 5th & Walnut sts.,**

**CINCINNATI, O.**



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus; connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bet Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.  
FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,  
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,  
Master of Transportation, Baltimore.JOHN M. SHARP, General Traveling Agent,  
July 0 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:10 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.

## PAGES

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1857.

November 9.

1857. 857.

Summer Arrangement.

185

LITTLE MIAMI  
AND COLUMBUS AND XENIARAILROAD.  
EXCLUSIVELY AN EASTERN ROUTE.  
THROUGH TICKETS VIA.

WHEELING,  
STEUBENVILLE,  
PITTSBURGH,  
CLEVELAND,  
DUNKIRK,  
BUFFALO,  
NIAGARA FALLS,  
To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 8:30 P. M. Evening Express, through to Bellair and Pittsburg without change of cars.

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville and Wheeling Lightning Express, leaves Cincinnati at 6 o'clock A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Accommodation, leaves Cincinnati at 4:40 P. M., for Springfield and Columbus.

This train also makes connections for Wilmington, Lancaster and Zanesville. This train stops at all points between Cincinnati, Springfield and Columbus.

FOURTH TRAIN.—Cleveland, Pittsburgh and Wheeling Night Express, leaves Cincinnati at 8:30 o'clock P. M., for all the Eastern cities.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.  
Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Little Miami and Covington and Lexington offices, No. 2 Burnet House; or at the Old Office, south-east corner Broadway and Front, opposite Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

TO LOUISVILLE  
IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,  
Acting Superintendent.  
If Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,  
Ag't Cin. and St. Louis Omnibus L  
Office No. 2 Burnet House.

Jan2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
Jan8 1y 119 Walnut st., Odd Fellows' Buildin

Cincinnati, Hamilton & Dayton  
[TRUNK LINE.]RAILROAD,  
FOR THE  
NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURG, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPORT,  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburg, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburg and Philadelphia, reaching Pittsburg at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPORT EXPRESS leaves at 6 A. M., for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburg and Philadelphia, arriving at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:35 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:30 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

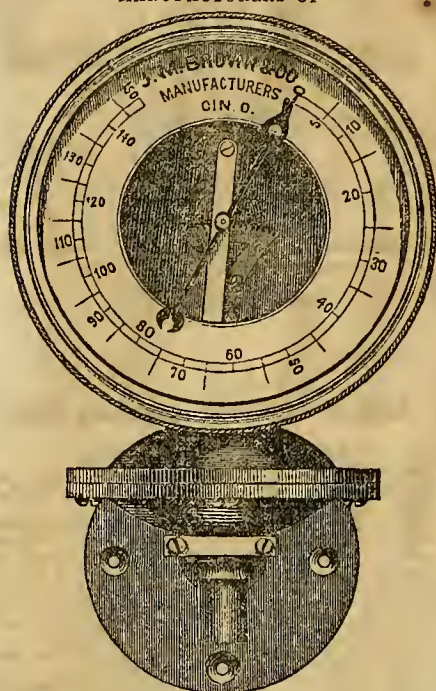
D. McLAREN, Superintendent.  
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR

LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

mar26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER &amp; SON,

82 PLATT STREET, New York.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes Copying. **—For Letter-press only.** Have had awarded them 14 Diplomes, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

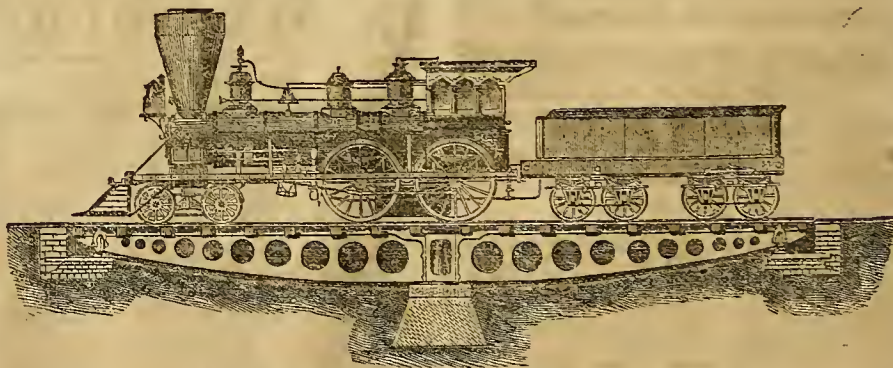
N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent, made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

# William Sellers & Co.

—LATE—

## BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING AND SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*: such as Horizontal Planing machines, Vertical Planing machines, Lathe, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, J.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, DECEMBER 31, 1857.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 45.

EDITORIAL.	
Human Mortality .....	673
Geological Survey of the State of Texas .....	674
A New City .....	674
Covington and Lexington Railroad .....	675
RAILROADS.	
Important Decision .....	676
Report of the Railroad Commissioner of Tennessee .....	676
Railways of the United Kingdom in 1856 .....	678
MISCELLANEOUS.	
Dressing and Budding of Orea .....	677
Post Offices in the United States .....	678
Application of Steam power to the Telegraph .....	678
MONETARY AND STOCKS.	
Monetary .....	680

COAL TRADE OF PITTSBURGH.—The following are the returns of the Coal trade of Pittsburgh for the past three years:—

	Bushels.
Year ending Jan. 8, 1856 .....	29,234,000
“ “ Jan. 8, 1857 .....	8,584,095
“ “ Jan. 8, 1858, (Dec. estimated) .....	29,251,399

The above figures show an enormous deficit in the amount of Coal shipped down the Ohio during the year 1856, and readily explain the cause of the high price of fuel during all last winter.

BOSTON BANKS.—The weekly statement of the Boston Banks gives the following for the week ending December 21, 1857.

Loans and Discounts .....	\$50,209,477
Specie in Bank .....	4,579,092
Deposits .....	15,606,033
Circulation .....	5,627,407

THE BANKS OF PENNSYLVANIA.—The returns of sixty-four Banks in the State of Pennsylvania show the following aggregates:—

Circulation .....	\$11,432,363 99
Coin .....	4,463,916 81
Deposits .....	16,421,539 97

Proportion of coin to circulation and deposits, 1-6.  
The proportion of coin to the aggregate of circulation and deposits varies from one-half to one twenty-third. The Bank of Pittsburgh has \$317,146 46 in coin to a circulation of \$159,367 00. While the West Branch Bank at Williamsport has \$11,278 26 in coin to a circulation of \$118,490 00. The discrepancy between the amounts of coin and circulation in this last instance is too great. There should be some controlling power which would prevent such enormous extensions as is shown in this instance.

### HUMAN MORTALITY.

The statistics of mortality have always been an interesting topic; for all mortals are interested in the laws of their being, and the tendency to decline. If any one wishes to see the human race attain the age of the patriarchs, or feel that its longevity is increasing, he will now have some cause of satisfaction, for nothing is more certain than that in civilized countries, the life of man has increased. The general increase in Europe has been an addition of *five years* to the average life of man, in the last hundred years. There is no reason to doubt this; because we know there are *causes* for it, sufficient, in our estimation, to produce such an effect; and because we also know, that for a long time the statistics of leading nations in Europe have been kept with great accuracy.

It has been said, that when neither war nor pestilence affects population, it increases, as food increases; but this cannot be true; for, in the region where food abounds more than any other—the Tropics—the population does not increase faster than in the temperate regions—often not as fast. The reason of this is, that the *climate* destroys population with double rapidity. We shall show this by some tables which are indisputable. The following is a table of the deaths in cities of the United States, furnished by Dr. Barton, of New Orleans, to the American Medical Association. The authority is undoubted, and the results curious.

Boston .....	1 death in 48.87 persons.
Philadelphia .....	1 “ “ 48.92 “
Charleston .....	1 “ “ 48.36 “
Havannah .....	1 “ “ 35.87 “
Baltimore .....	1 “ “ 29.37 “
New York .....	1 “ “ 27.83 “
Mexico .....	1 “ “ 27.76 “
New Orleans .....	1 “ “ 19.32 “

It must be mentioned here that one of the years in New York and New Orleans were cholera years. But, after making all allowance for errors, it must be evident, that there is a vast difference between the mortality of the Gulf of Mexico and that of New England. Indeed, nothing has been better demonstrated than the disastrous influence of tropical climates on health. Yet, it is true, that those who survive their youth in tropical climates, frequently live to a great age. Notwithstanding this, life in the tropics is short, and climatic influences are beyond a doubt, among the most powerful which cause the decay of the human system.

Next to climate, the greatest differences in mortality is caused by cities or confined populations, in comparison with the country. Quetelet, the great Belgian Statistician, gives the following table of deaths for Belgium.

Population.	Deaths.	Proportions.
Cities .....	998,118 .....	27,026 .....
Country .....	3,066,091 .....	65,265 .....

The proportions stand about 4 to 3; that is, the ratio of deaths in the cities is *one-fourth* greater than in the country. This difference will be particularly striking, if we examine

the mortality of European cities. The following is the mortality of cities in Europe, proceeding from north to south:

London .....	1 in 51
Amsterdam .....	1 in 31
Hamburg .....	1 in 30
Brussels .....	1 in 56
Vienna .....	1 in 22
Madrid .....	1 in 56
Lisbon .....	1 in 31
Rome .....	1 in 24
Venice .....	1 in 20

We see here both climate and city life conspiring to increase mortality. In Venice the deaths are double those of London, while the deaths in Brussels are nearly double those of the surrounding country, as given in the table above. But, the variations in mortality caused by climate and by cities, are far less than those occasioned by the hazards of particular periods of life. The period of infancy is one in which the human being literally *runs the gauntlet*. The infant is feeble, tender, sensible acutely to all external influences, and liable to numerous diseases, which do not occur in after life. The consequence is, that the deaths in childhood are in the inverse ratio of age—the greatest number occurring in the first year, and of these, the greatest number in the first month.

The following curious table of the ratio of deaths in 100,000 persons in Belgium was constructed by Quetelet, and will show at once the periods of greatest mortality. The number on the right is the number out of 100,000 remaining at each period.

Birth .....	100,000
1 month .....	90,396
2 “ .....	87,936
3 “ .....	86,175
4 “ .....	84,720
5 “ .....	83,571
6 “ .....	82,526
1 year .....	77,528
2 years .....	70,536
5 “ .....	62,448
10 “ .....	58,258
15 “ .....	56,028
20 “ .....	53,454
25 “ .....	49,095
30 “ .....	46,758
40 “ .....	40,889
50 “ .....	34,789
60 “ .....	27,242
70 “ .....	17,017
75 “ .....	11,273
80 “ .....	5,867
85 “ .....	2,464
90 “ .....	682
95 “ .....	153
100 “ .....	10

In Belgium, then, an inspection of this table shows, that the *probability* of life is at 25 years; for at that period the number of infants dead and living, out of the whole number, are about equal.

In looking to the influences of *sex*, we find, by examining similar tables, that the probability of life is greater at birth for the female than the male.

Looking still further into the table, we perceive that at *five* years the mortality rapidly diminishes, so that, in fact, at *five* the *probability of human life is greatest*. At that time it is *possible* the child will live to be 55, that is, half a century from that time.

At *ten* the probability of life is 48 years more. At *twenty* the probability is for 40 years. At thirty for 34 years. At forty for



27 years. At fifty for twenty years—that is, that he will attain 70 years—the life of man. Fifty years of age is the first period in which a man has the *probability* of attaining *seventy years*.

The age of *five* is very remarkable, says Quetelet, in the natural history of man. In proportion as we remove from it, the probabilities of life become shorter and shorter.

We may terminate this inquiry with what is called the *mean* life of man; that is, taking the sum of all ages at death, the average of the whole is the *mean average life*. The *mean* life in Belgium is 32.15. In England it is 33 years. In France 32.2. Then the *mean* life of man in the most civilized countries of Europe is but *thirty-two and a half years*!

As we remarked in the first place, the average duration of life is gradually increasing. The reasons are sufficiently obvious. The comforts of life, the means of health, the prevention of disease, the curative treatment, all are far in advance of what they were, in generations past. This is certainly the highest evidence of an advancing civilization.

#### GEOLOGICAL SURVEY OF THE STATE OF TEXAS.

The committee of the Legislature of Texas to whom the subject of a geological survey of that State was referred, have reported a bill providing for that object. In their report they state that "there is no State in the Union in which such a survey would be attended with more important and useful results. It is believed that our State abounds in rich beds of iron ore, coal, copper, and the more 'precious metals,' beside water powers adequate to the purposes of merchant mills, manufactories, &c., and which only need to be pointed out and defined by a Geological survey, to give direction to capital and enterprise in their development. Many of the citizens of our State may be the owners of property underlain by rich mineral deposits, the locality of which being ascertained by a Geological survey, might, by the application of a little industry and energy, be made the means of enriching the citizen, and of contributing largely to the coffers of the State. Indications of coal are to be found scattered over a large section of our State, and the actual existence of coal fields, has been discovered in the neighborhood of Fort Belknap, and in other sections. If these coal fields are ascertained to be extensive, it would be difficult to calculate their value to large sections destitute of timber for purposes of fuel. It is also believed by the committee, that there are beds of iron ore in many portions of the State, sufficiently rich to induce the investment of capital in their development, which would be the means of saving thousands of dollars to our citizens, now paid out annually

to other States of the Union, and to Europe, for iron, for railroads and agricultural purposes. But by no means the least important argument in favor of a Geological survey of the State, is the benefits to be derived from a chemical analysis of the soils of its different sections, which the Geologist will be required to make, and by which the former may ascertain the character of his soil, and the species of produce to which it is best adapted—information which can be acquired in no other way excepting by actual experiment, which too often costs years of profitless toil, and sometimes ruin and bankruptcy. It is especially important, too, that this Geological survey should be made as soon as practicable, in order that it may be in advance of the railroads projected through our State; for if the coal, iron and copper mines of the State are as rich as the committee are justified in supposing them to be, it is not unreasonable to suppose that their Geological locality will have an important influence upon the course of these railroads. It is said that capital seeks safe investments, and upon the same principle railroads will pursue that course and penetrate that region promising the largest patronage. In addition to this, it is the opinion of the committee that no instrumentality could be more effective in bringing about a domestic commerce between the different sections of the State, than the development of her mineral wealth and resources."

#### A NEW CITY.

We copy below, from the *Toledo Blade*, a sensible article under the above caption, referring to the projected City of Mackinaw. It is no longer a problem that admits of question, that the channels of commerce indicate the position of the great cities of the world, and that where those channels, whether natural or artificial, converge, there a town must spring up that will be proportionate in its extent and importance, to the extent and importance of the trade that naturally converges there. Thus Mackinaw City, located at the straits which unite the great lakes of Michigan, Superior and Huron, and which separate the great northern peninsulas, now known to be so rich in mineral deposits, coal, iron and copper, and what is more, the terminus of two great railroads which must shortly be built, can not fail to derive from its natural position an importance which will increase as the resources of that rich mineral region are developed, and enterprise and mechanical skill are enticed by the inducements of cheap material furnished in abundance.

#### A NEW CITY.

If one were to point out on the map of North America, a site for a great Central City in the lake region, it would be in the vicinity of the Straits of Mackinaw. A city so located, would have the control of the mineral trade, the fisheries, the furs, and the lumber of the entire North. It might become the metropolis of a great commercial empire. It would be the Venice of the Lakes.—*Ferris's States and Territories of the Great West.*

The immense commerce of the lakes, the growth of which have been unparalleled by

any thing in the history of the world, and the vast mineral, timber, and agricultural resources of their shores, which are, even now, only beginning to attract attention, may well awaken a desire on the part of enterprise to get possession of the key position which is to command and unlock the future treasure of this vast empire. Already, six important commercial cities, with an aggregate population of about 350,000 have sprung up, on these inland waters, and are the most flourishing of any away from the Atlantic coast. Others are struggling into notoriety on the borders of Lake Superior, and must, at no very distant time, become important and active places of business. But the place of all others, where we would expect a city to spring up and grow rapidly into importance, is still undeveloped.

The Straits of Mackinaw, four and a half miles wide, make the only natural ferry communication between the great peninsula enclosed by the lakes, and the rich mineral region lying on the southern border of Lake Superior; and must, hence, be the terminus of all the great Railroad lines that traverse Michigan longitudinally, and compete for the trade north of the straits, now rapidly growing into importance. It must, therefore, be the point of radiation, eastward, through Canada; westward through the mineral region; and southward, through Michigan. Canada has already made grants of land for several important roads which must ultimately reach the straits; and lines are also provided for by government grants, from the straits through the northern peninsula, and from the straits southward to Fort Wayne by the way of Grand Rapids and to Toledo, through Lansing. The culminating point being thus settled for several roads, all others will naturally center at the same crossing, even if the coast line had not made such a thing inevitable.

The point which projects northward into the lake, from the Michigan peninsula, to form this strait, is admirably located for a great city. It is the site of old Fort Mackinaw, and in its harbors, climate, surface, soil, health and commercial position, can have no rival in those northern waters. This point has been selected by a company of capitalists, on which to plant the commercial city of the North; the Venus of the Lakes, foreshadowed in the extract which we have placed at the head of this article. The new city is to bear the name of the ancient fort and strait, and to be called Mackinaw. It will hold the key of all the Northern lakes; and, should its growth be marked by energy and enterprise, will command the trade of the greatest mining region in the world; be the chief depot of the northern fisheries; the outlet of an immense lumber trade; and the focus of a great network of railways, communicating with the tropics on the south, and stretching out its iron arms, at no distant day, to the Atlantic on the east, and the Pacific on the west.

The proposed city will have the advantage of the most salubrious climate to be found in the temperate zone, and will be the resort of those seeking health as well as those seeking wealth. It has a high northern position, being on the same parallel as Montreal; but the winters are equable, and the summers, though short, are mild and pleasant, being modified by the great body of water which stretches out on every side, except at the south. As a manufacturing point it may well command universal attention. The Lake Superior iron is known to be the best in the world, and coal and wood are at hand in the greatest abundance.



dance; while the communication by water is so wide as to leave nothing to desire on that head. It should be as famous for smelting as Chelsea in England, for it must have unbounded supplies of Iron and Copper ore.

But we have not space to speak further of its commercial position. It must be seen, at a glance, that, as all the produce which flows through Chicago, Milwaukee, and the great west, must sweep by on its way to the east, and all the goods and merchandise of the east must be borne by its wharves on their way to the west, that it can not fail to be a point which must spring at once into importance. The government, too, must have a fort, a light house and a custom-house there, which, with the fisheries, must supply a large and profitable business to its earlier population. But we shall make our article too long, and will close by asking the attention of the reader to the card of the Trustees, published in our advertising columns.

## Railroads.

### COVINGTON AND LEXINGTON RAILROAD.

It is now two years since this company published an *Annual Report*. Subsequent to the meeting of the Stockholders for the year 1856, it was understood that the reports were in the hands of the printer, but as we have never seen or heard of a copy of them, we presume that they must have been too voluminous for publication during any one year. At the meeting of the stockholders in Covington on the 15th of December, 1857, the President read his report for the past year, for the abstract of which we are indebted to the reporter of the *Cincinnati Gazette*. We will add that it is understood that the reports will be printed this year, and we trust they will not be found so voluminous as those of last year.

The President's report was dated Nov, 1, 1857, and began with an apology for the Company's not reporting sooner, which had been occasioned by the inability of the Company, from the way their accounts and affairs had stood, to give a comprehensive report, which was the only one that would be satisfactory. Such former reports as had been given, were imperfect, and therefore perhaps there would be discrepancies between them and the present one. He then stated that the receipts of the road the first year ending October 31st, 1854, were 87,964 38 dollars; the second year 264,973 66 dollars; the next year 399,948 12 dollars, and the last year 426,408 36 dollars. He then returned to the difficulties of the last year, and complained of a want of cars and depot buildings, etc. Also spoke of no accidents occurring on the road to passengers, and of the friendly relations of the road with other roads.

During the last year the Maysville & Lexington Road had been leased for ten years, that Company to keep the road in order, and the Covington & Lexington to stock it with cars, one-half of the gross earnings to be paid

to the former road. On the 9th September, cars were run through to Nicholasville, by contract with the Lexington & Danville Company, by which the receipts were to be divided, and the contract at any time annulled by six months' notice. He stated there were fourteen locomotive engines on the road in good order, also five first class cars, four second, do., four baggage, do., one hundred and twenty-seven box, do., forty-five platform, do., ten high rack cattle, do., and thirty-five dump and hand, do., and one rubble car.

The other reports set forth the following particulars:

The receipts from freight and passengers for the last year were 426,308 36 dollars. The expenses of operating the road, 194,891 89 dollars, and the rent of the M. & Lex. and Dan. Roads, 26,213 98 dollars. Total 221,105 87 dollars. The expenses have been heavy this year, 194,891 98, on account of the large amount of ballast required, the new turn table, new water stations, etc., etc. By the Clerk's Report, the following were shown to be the Company's.

#### ASSETS.

Construction.....	\$3,719,563 80
<b>ROLLING STOCK.</b>	
Locomotives.....	\$123,334
Freight cars.....	114,440
Passenger cars.....	17,800
Mail and baggage cars.....	6,750
Construction cars.....	6,230
Hand and dump cars.....	3,030
	<b>271,458</b>

#### REAL ESTATE AND MACHINERY.

Depots, etc.....	\$76,115 77
Machine shops, etc.....	24,340 50
	<b>100,456 17</b>
Total.....	<b>\$4,091,603 97</b>
Lex. & Danville R. R. stock.....	\$62,000
Ky. Trust Co. Bank.....	10,000
Income Bonds, (10 per cent.) in hands of S. J. Walker.....	22,000
Income Bonds, (6 per cent.) in hands of S. J. Walker.....	63,500
Income Bonds, (10 per cent.) in hands of Secretary.....	4,000
Unadjusted balance in hands of S. J. Walker, subject to such credits as may hereafter have satisfactory vouchers.....	78,441 01
Due on stock subscription, (a great deal not good).....	53,125 77
Unadjusted balances, (mostly good).....	17,608 10
J. T. Winslow, of Albany, owes for one mortgage bond.....	1,000 00
Due from United States.....	818 83
Due from Agents.....	7,290 63
	<b>\$1,440,766 37</b>

And the following the

#### LIABILITIES.

Capital Stock.....	\$1,584,850
Less amount issued as Collateral.....	200,000
	<b>\$1,384,850</b>
<b>BONDS.</b>	
First Mortgage, 6 per cent.....	150,000
" " 7 " ".....	250,000
Second " 7 " ".....	1,000,000
Third " 7 " ".....	600,000
Guaranteed by City of Covington.....	200,000
Given to City of Cincinnati.....	100,000
Income, bearing 10 per cent. int., July 10, 1854.....	200,000
" Dec. 1, 1854.....	200,000
" Feb. 1, 1855.....	210,000
Total Bonded Debt.....	<b>\$2,930,000</b>
Bills payable belonging to the Floating Debt.....	\$38,937 07
Current Bills payable of 1857.....	34,942 01
	<b>\$73,879 08</b>
Due officers and laborers.....	\$36,184 83
Due contractors and others in stock.....	3,263 10
Do. do. in Bonds and stock.....	6,171 69
Unadjusted Balances due to Contractors and others, which have in fact almost entirely been paid, but accounts not finally adjusted.....	16,418 17
	<b>\$4,440,766 37</b>

The Discount paid by Company on Bonds, etc., amounted to.....\$1,078,000

The items of expenditure and receipt for the past year, were:

Coal and wood.....	\$33,083 40
Oil, tallow, and waste.....	5,531 92
Repairs of cars and engines.....	41,226 65
Repairs of road, bridges, depots, etc.....	63,826 44
Loss and Damages.....	5,003 34

The receipts were as follows:

Freight.....	\$256,643 28
Passage.....	154,905 73
Express freight.....	5,093 36
Mail service.....	9,776 00

The following gentlemen were elected Directors for the ensuing year, all of whom were of the old Board, excepting Col. Bowler, who takes the place of Mr. McCoy, resigned; Jno. T. Levis, John B. Casey, A. Robbins, E. Oldham, John Cunningham, L. Desha, B. W. Foley, W. W. Gedge, and R. B. Bowler.

#### IMPORTANT DECISION.

The Pittsburgh & Connellsville R. R. Co. } Error to the Common Pleas of Beaver Co.  
vs. }

Barker, et. al.

Lewis, Chief Justice.—The questions arising in this case have been disposed of in the opinion just delivered in the case of Garrard vs. The Pittsburgh and Connellsville Railroad Company. For the reasons given for affirming the judgment of the District Court of Allegheny County in that case, the judgment of the Court of Common Pleas of Beaver County, in the one now under consideration, must be reversed.

The evidence clearly shows that the bonds in controversy belonged to the plaintiff in error, and that they were disposed of by an agent fraudulently for his own benefit, and without authority. The right of the plaintiff to follow and reclaim them, until they are found in the hands of a *bona fide* purchaser for a valuable consideration paid, is equally clear. Having shown that the right of property is in the plaintiff, and that the bonds are in the possession of the defendants, under an agreement to hold them as collateral security for a pre-existing debt, the burthen of proving some new and distinct consideration is clearly on the defendants. They gave no evidence whatever tending to establish such a fact; and the excellent Judge who presided at the trial below, fell into the error of submitting to the jury to find an extension of time on the pre-existing debt, not only without evidence, but against the whole evidence given on the subject. It is conceded that the deposits of the defendants with General Larimer, as their banker, were originally subject to "immediate withdrawal." This, the learned President of the Common Pleas tells us, "the book proves." If any change in the contract had taken place, in consequence of receiving the bonds as collateral security. It is reasonable to suppose that it would have been entered in "the book," as "the book" was kept by General Larimer himself; and as an extension of time for the re-payment of the deposit was for his benefit, the presumption is that if any such arrangement had taken place, he would have entered it therein. But "the book" shows that that the deposits remained, after the receipt of the bonds, upon the original terms, subject to "immediate withdrawal at the pleasure of the depositor." In addition, it is well known that deposits with bankers are so generally made upon these terms, that an agreement to deprive a deposi-



tor of his right to check for his money at pleasure, would be unusual and improbable; the banker would not put his credit in peril by asking it; the depositor would not be likely to agree to it without strong reasons. In the case before us, "the book" also shows that no such agreement was acted on by either party. The balance due the depositors on the 10th of November, 1854, when the bonds were received, was \$8,380 61. According to the ledger of Gen. Larimer, the balances due the defendants were greatly reduced between the 10th November, 1854, and the 1st January, 1855. On the 10th November, 1854, the balances due to two of the defendants amounted in the aggregate to \$7,928 96. On the 7th January, 1855, the balances were reduced to an aggregate of \$4,594 88. Here is a reduction of \$3,334 in less than sixty days. This, the President Judge tells us in his charge, was done by "checking" for money "from time to time, as occasion required." This the defendants could not have done if there had been managements to preclude them from drawing their money out at pleasure. The receipt given for the bonds, warrants the inference that the defendants still retained in their possession the certificates of depositors. These were originally given as evidence of the terms on which the deposits were made. The retention of them, unchanged in their terms, is strong evidence that no agreement was made, on receipt of the bonds, to vary the rights of the parties in respect to the pre-existing debt. The nonproduction of these certificates, when called for on the trial, standing unexplained by proof of loss, or destruction, or any other circumstance, justified the belief that they contain nothing tending to show any change in the original contract. Neither the receipt given for the collaterals, nor the certificates of deposits, nor the books, nor the acts of the parties, show any new and distinct consideration. On the contrary, they all tend to show that the rights of the parties in respect to the deposits, remained precisely as they stood before. This is the only legitimate inference which can be drawn from the evidence. It was, therefore, error to encourage the jury to find, with this evidence before them, that there was an agreement for a "further credit." How long the "further credit" was to extend, we are at a loss to conjecture. An agreement to forbear *per breve*, or *parvulum tempus*, or *pro aliquo parvo tempore*, or even *pro aliquo tempore*, seems to have been thought insufficient as a consideration, "because it is so uncertain in its terms as not to stand in the way of a suit the next moment." Per ch. J. Gibson, in *Sidwell vs. Evans*, 1 Penna. Rep., 385. For the same reason Judge Washington held that a promise to forbear for a short time would not be a good consideration.—*Louisdale vs. Brown*, 6 W. C. C. R. 151, *Lutwick vs. Hussy Cro. Eliz.* 19. It is not necessary to decide whether an agreement for "further credit," without specifying how long would constitute a consideration more available than an engagement to forbear for "a short time," because there is no evidence of any agreement for any forbearance at all. It is possible that the defendants, on the receipt of the bonds, considered their money sufficiently secured if left on the original terms. By these terms they could exercise a superintending vigilance, and withdraw it on the approach of danger. They could also withdraw it at any moment when they desired it for their necessities, or for business operations. This was a power over it which was

advantageous to them. As men do not usually give up pecuniary advantages, or sacrifice their interests, or surrender up the reins of power without necessity, it is not to be presumed that it was done in the present case. There is every reason to believe that they could have obtained the possession of the bonds merely to quiet present fears, without any agreement whatever which would stand in the way of a check, or an action for the money the next moment. If so, it was merely a case of "confidence," without legal consideration, and furnishes no defence to the present action.

Judgment reversed, and *venire facias de novo* awarded.

#### REPORT OF THE RAILROAD COMMISSIONER OF THE STATE OF TENNESSEE.

I herewith submit my report as "Road Commissioner," made in compliance with an act of the Legislature of the 29th February, 1856. The utmost limit allowed has been required, in which to prepare this report, caused by the delay of the different railroad officers in transmitting theirs. The law requires them to do so at least sixty days before the meeting of the Legislature. In no instance has this been done, and it is respectfully suggested, that the law on that subject, be so amended as to enforce a more prompt compliance hereafter.

Since my former report to the Legislature, five of the roads, embraced in the general system of improvements, have been put in course of construction. These are the Edgefield & Ky., Central Southern, Memphis, Clarksville, and Louisville, Rogersville and Jefferson, and Chattanooga and Cleveland Roads. Of the roads then reported to be in progress, the work has been suspended on three of them, viz: The Knoxville and Kentucky, Cincinnati, Cumberland Gap and Charleston, and the Nashville and North-western roads. The first of these was suspended a few weeks ago. I have received no report from the officers of this road, but learn unofficially, that the policy of the company is not to abandon the work; thirty miles of this road was under contract, and a considerable amount of work done on the roadway.

The Cincinnati, Cumberland Gap, and Charleston Company had placed a portion of their road under contract, and some grading was done along the line. The Company also expended about ten thousand dollars on a bridge across the Holston river. The citizens of Western North Carolina have been engaged during the past summer in an effort to procure the requisite amount for building a railroad from Ashville to Paint Rock, the eastern terminus of the Tennessee Road. Should this effort be successful, it will have no small influence upon the fortunes of the Tennessee road.

The report of the President of the Nashville and North-western road, shows a purpose to resume the work, so soon as the amount necessary for the road way can be obtained; there has already been expended on the whole grade, about three hundred thousand dollars.

At the date of my former report, the aggregate length of finished roads in Tennessee, was 336 miles, exclusive of the Georgia portion of the East Tennessee and Georgia road. Since then, there have been 299 miles completed, making a total of 635 miles of finished road in the State.

It will be seen that the roads entitled to

State aid, and whose companies have commenced the work of construction, with the roads now finished, make an aggregate in distance of 1,612.03 miles. The total actual and estimated cost of 1,385.73 miles of these roads is \$28,844,759.35, an average per mile of \$20,826.53. The State aid granted to the roads whose cost is given, amounts to \$16,406,000.

The whole sum pledged to the companies which have completed their roads, or placed a part of their respective lines under contract, amounts to \$19,096,000. The amount granted to the finished roads, and those now in actual progress is, \$15,481,000, leaving \$3,615,000 the sum pledged to the companies which have suspended operations. Assuming as I do, that the work will hereafter be prosecuted on some of the latter roads, and that they will be carried on to completion; it may, with equal certainty be assumed that some of the roads reported as in progress, will not be built to the extent originally contemplated. In several cases, the companies are permitted to stop at intermediate points, and without question, it will be the true policy of some of them to do so. The law, also, allows some of the companies to unite their roads with others, thereby lessening their lengths; this also, it is reasonable to conclude, will be done to a greater or less extent. In view of these, and other facts, which it might appear invidious to state, it may be confidently estimated that the present and prospective liability of the State under its General Internal Improvement system, will not exceed sixteen millions of dollars.

To secure the State against ultimate loss for her liabilities incurred on behalf of the railroad companies, she will have a mortgage on an investment of probably not under thirty-five millions of dollars. Should the roads in the State be able to make a net profit of  $4\frac{1}{2}$  per cent. on their original cost, it will be sufficient to meet the interest on the State loan, and to provide for the final extinguishment of the principal debt. The companies whose works are finished, have been able, from the earnings of their roads, to meet their liabilities to the State, with one exception, which will be noticed hereafter; and the regularly increasing profits of the unfinished lines render it almost certain that such will continue to be the case. The greatest danger of failure in this respect will be from the few lateral roads, belonging to the system, which being confined to local business, will earn a comparatively small amount. Instead, however, of keeping up an independent organization, and a separate equipment, the companies of such, will, it is hoped, as a matter of sound policy, place their works under the control and management of the main line companies, throwing upon them the burthen of providing for the debt of the State. A long road, necessarily, must have provided for it some surplus of rolling stock, which can be used in operating short lines with but little additional expense. A saving, too, of officers' salaries on the lateral roads, would also be the result of such union.

It is proper here to state, as a fact highly creditable to the Tennessee Companies, that they have uniformly met the interest of their State debt. This has to be done by companies whose roads are in progress, when the work itself can pay little or nothing, and when the constantly recurring, and heavy claims of contractors have also to be met.

When applications have been made for the State Bonds, I have in each case examined



into the pecuniary condition of the Company making such application, taking also such proof as was deemed necessary,—besides personally inspecting the condition and finish of the section of road, on which State Bonds were sought to be obtained. My reports in reference thereto, made to the Executive, are on file in the office of the Secretary of State.

Before submitting the separate condensed reports of the different railroads, a few general remarks, and some suggestions respectfully offered, may not be out of place.

The Memphis and Charleston road at the date of my former report, was in an unfinished state, there being at that time 88 miles in operation. The road was completed about the 1st of April last, and a direct connection established between Memphis and the Southern Atlantic cities. This road has a complete equipment, and its earnings, as will be seen, are altogether satisfactory. The freight business of the spring and summer, was comparatively small, but the travel has been heavy. No doubt is entertained but that the profits of this road will be large.

The Memphis and Ohio road is now completed to Brownsville, a distance of fifty-seven miles from Memphis. The company having completed seventeen miles since February, 1856. Most of the unfinished line to Paris is under contract. This road is at present confined to a local business, and must so continue, till its northern connection shall be established by means of the Mobile and Ohio road. To effect this, the company will have to finish twenty-four miles of additional road to the proposed junction of the two in Gibson county. The Memphis and Ohio road when so extended will form a link in the line of roads filling up from Cairo to New Orleans, by the way of Memphis, and on which a large amount of through business will necessarily be done. Could this road in further progress be united with the Middle Tennessee roads tending to the same point or section of country, it might operate to the curtailment of the State liability, and also to the interest of these enterprises.

The work on the Mississippi and Tennessee road is now being carried on in the State of Mississippi. There are fifty-nine miles of the work in operation, and the remaining distance of forty miles has a portion of it under contract.

At Grenada the line of this road falls into the Mississippi Central, running from Jackson, Mississippi, to the Tennessee State line: the balance of the line from Jackson is formed by the New Orleans and Jackson road. These different works are being carried forward, and when finished, will aid to establish the River line from New Orleans to the mouth of the Ohio river.

The Mississippi Central and Tennessee, with the Mississippi Central, is but an extension of the New Orleans and Jackson road, by the way of Jackson, Canton Grenada, and Holy Springs, to Jackson, Tennessee; at which place it connects with the Mobile and Ohio road, and will form in connection with the northern end of that road, another continuous line of railway from New Orleans to the Ohio river. The Mississippi Central and Tennessee, it will be seen, is finished to the Mississippi State line. From that point south, the Mississippi Central is completed about forty miles, and the balance of the line is in course of construction. The net earnings of the Mississippi Central and Tennessee road may appear small for a road of its length, but it should be understood that the work has

only been completed to Jackson about two months, and the earnings are properly credited to twenty-seven miles of the road which have been in operation for the past twelve months. It is not calculated that roads in this condition will do much more than defray expense. This remark will apply in a greater or less degree to all partially finished roads.

The Mobile and Ohio company, at the date of my former report, had prepared most of the road-bed through Tennessee; since then some additional grading has been done, and most of the bridges finished. The iron for about ninety miles of the superstructure on the Tennessee division was purchased about two years ago. There has, however, been a good deal of delay in pressing forward this work in Tennessee, produced, it is understood, in the first instance by unfortunate dissensions in the company, but more recently by the loss of a cargo of iron intended for the Kentucky portion of the road. On account of this misfortune the company were unable to complete the track to the Tennessee State line, which was indispensable in order to transport the Tennessee iron to the proper point. I learn that iron has been purchased for the gap of four and a half miles on the Kentucky part, and that track-laying will soon commence from the State line, and also from Jackson, Tennessee. A large amount of grading and bridging has been done along the Mississippi division of this road that remains to be finished, and the track-laying is progressing from the southern end of the road. This road, when finished, will be one of the longest main trunk lines in the Union, and will of itself establish a connection betwixt the city of Mobile and the north-west.

The reports of the Nashville and Chattanooga road, show that its business has been regularly increasing. From its earnings, the company have been able to meet all their liability upon their funded debt, and to pay some dividend to the stockholders. But the full capacity of the road will not be tested, until the general system is completed. Fortunately, the Tennessee roads are so located, that they will not become the mere rivals of each other; each will have its appropriate business, without destroying the profits of the other. On the contrary, as a general result, one road will sustain and increase the business of the others.

The Winchester and Alabama Company commenced grading shortly after the inauguration of the general system of Internal Improvements. The work of construction was suspended for a considerable time, but it has lately been resumed in connection with the Fayetteville Branch. The company, as appears from their report, have ample means for finishing the roadway to Fayetteville.

The McMinnville and Manchester road has been in operation for about twelve months. The earnings of the road, though less than the interest on their bonded debt, have equalled the anticipation of its friends, and should the business increase, as on other roads, it is hoped that the profits will be sufficient to meet all liabilities. Should the company, however, have any difficulty in this respect, they will, it is hoped effect such an arrangement with the Nashville and Chattanooga Company, as will protect the interests of the State, and be mutually beneficial to the companies.

The Memphis, Louisville and Clarksville company have made no detailed report; but I will here state that thirty miles of their road is under contract, and a heavy working force

has been engaged along this section. This line, when finished, will give a direct connection between Memphis and Louisville, and thereby receive a large amount of through travel from betwixt Louisville and New Orleans, and other intermediate points.

TO BE CONTINUED.

[From the Lake Superior Journal, Marquette, Mich.]  
**DRESSING AND BUDDLING OF ORES.**

Mr. C. H. G. Thost, of Tyndrum, N. B., has made several improvements in these important operations, the particulars of which he has forwarded to us, with most elaborate details. By his method a wooden trough is first constructed, of about ten feet in length, by joining two boards of from 12 to 14 inches in width, and about one inch thick; this must be at an angle of from 100° to 110°; the inner side of the trough will have to be lined with sheeting from 6 to 7 inches high; this should be placed on a support, and in such a way that it leaves a distance of at least one foot from the plane of the picking table; this must be calculated according to the stuff to be dressed and the water available for the purpose; the trough receives an inclination of from 8° to 12°; the water conducting pipe is fixed at 2 feet distance from the upper end of the trough. When the stuff is thrown into the trough, and the water is poured upon it, a hoe is employed to work it, and push the ore upwards; having reached there, it falls upon the picking table, which at that spot may have a grate, for the purpose of letting the water and the smaller pieces of mineral through. This system of cleansing is much more perfect than that on a horizontal table. The greater the power of water to be obtained, so much more inclination may be afforded to the table, although much less is here required than by the other method.

The underground stuff, too small for the picking, should be concentrated into as small a bulk as possible. The large sort can be separated by jigging, and the small by puddling; it is requisite to divide or separate the whole quantity of stuff being unfit for picking, into as many classes as the circumstances require. Underneath the trough there is a gathering box, in which the stuff, sliding down upon the bars of the grate, is received, and the smalls are forced by the water through the apertures; this is carried by self action into a trough of lesser dimensions, and is placed at an angle of from 5° to 10°; the lower end discharges this on a second grate, in a similar manner as occurs in the first process. In this last, instead of iron bars being employed, sieves, of a large hole, are used; the back of this grating discharges a quantity of water and stuff into a slime pit, where, without manual labor, a further separation takes place, and in most this is performed so effectually that the tailings and the middle of the buddle can be at once thrown away. It does not require that the arrangement on the dressing-floor should be in a direct line in order to carry out these operations successfully. Those processes must be varied according to circumstances, and the judgment of the ore-dresser; and this remark likewise applies to the number of grates that may be used, and their several modifications. The force obtained by the water rushing down the angle trough strikes against the apertures and bars of the grate; so that a certain size by this action is forced through them, and the larger size must slide down on the inclined bars of the grate; these but seldom require cleansing, as the constant friction obviates the necessity of this, and the



water can, by a simple arrangement, be successfully used.

In the "trunking" the stuff, whether stamped or crushed, it must by a flow of water be gathered in a spout, as often as the operation of striking against an inclined grate is required for the sake of obtaining several classes of ore, so often the water with the stuff suspended in it requires to be concentrated in a spout. Mr. Thost then alludes to the passing of water through the rollers at the time the operation of crushing is being proceeded with. In the case of ore stuff having been stamped, the water and the material having passed through the sieve plates at the sides of the stamp heads, must be gathered in an angle trough, the end of which discharges the water and slime on a grate of the like construction. The arrangement for "buddling" appear to be a very simple nature, as by previous operations any of the obstructions which might impede this last process are cleared away.

The work performed by this apparatus is considered greater than that by ordinary machines; the ores returned are clean, and this mode has been proved to be not only very effective, but at the same time it can be recommended for its economy, the outlay of a few dollars being all that is necessary for the construction of the apparatus.

The inventor is of opinion that it would be of great utility at the gold diggings, for the washing of the ore, the arrangement being so simple. No machinery is required; it can be erected at any place wherever a small stream of water is at command, while the gold digger may rest assured that not a particle of gold will escape him. A single man can carry on all the requisite operations, one after the other. It is not supposed to be applicable to gold mines, but simply to diggings. Another advantage is, that the apparatus may be attached to the patent frame, the round Cornish buddle, and the shaking tables. A regular and homogeneous supply of water is obtained for puddling purposes, and the various operations are based upon purely self-acting and self-regulating principles.

The system of dressing by Mr. Thost has been some time in operation, and according to his showing, the results arrived at have been favorable. Under all circumstances, the invention has this great merit, that it is practical and therefore unlike many of those inflated schemes for dressing and reducing ores which as yet have merely proved experimental in the majority of cases, though their projectors have amused the public with a series of chimerical trials and vague assertions for a considerable period.

#### APPLICATION OF STEAM POWER TO THE ELECTRIC TELEGRAPH

Mr. Isham Baggs, a gentleman whose name has been intimately connected with the progress of electrical science, has recently invented an instrument whereby the slowness of the operation of working the electric telegraphic signals will be removed. At present, although a signal is rapidly pressed forward by the electric current, a difficulty lies in the slowness with which the signals are formed, and thus it is at the signal station that the delay arises, as only a certain number of words can be formed in a given time. The instrument invented by Mr. Baggs substitutes steam power for the ordinary manual labor in framing the signals, and great saving of time and also of expense will be the effect,

as a greater number of messages, and messages of greater length can be despatched, and, therefore, a less charge in the price will be more remunerative than a higher one would be for the slower process. By means of this new instrument, any number of clerks may be employed to work at once on a message, which is to be—as it were—set up in type. The plan is to have a series of gutta percha bands rolled round appropriate wheels. These bands are studded with holes, into which the clerks insert brass pins, variously combining them in twos, threes, &c., according to the letters to be sent; and the gutta percha bands, when full of signals, will be passed rapidly by means of steam machinery, in such a manner, that as each pin passes it forms a metallic communication between the instrument and the wire, and a signal is consequently transmitted. There is hardly any limit to the rapidity at which the signal bands can be passed through the instrument, each pin only forming electrical contact for the hundredth part of a second, which will be amply sufficient to register a corresponding signal at the other end of the circuit. A Company is, we believe, in process of formation to carry out the invention. The application of this invention to the Atlantic submarine telegraph, will add immensely to the value of that undertaking; and in all cases telegraphic messages may be sent almost at the same length and with the same accuracy as written despatches.—*The Observer*.

#### POST OFFICES IN THE UNITED STATES.

The vast increase of our country in population and extent is strikingly shown in the report of the number of post offices in the Union, and the number of miles of post roads travelled, as compared with those of 1827, just thirty years ago. In that year there were 7000 post offices; in 1830 11,177; in 1847 15,146; and in 1857 they number 26,586. In this year 1725 post offices have been established, and 704 discontinued, leaving a net increase of 1021. The postmasters of 368 offices are appointed by the President.

The length of post roads in 1827 was 105,336 miles; in 1837, 141,242 miles; in 1847, 153,818; and in the year 1857 there are 252,601 miles of post road, including 22,530 miles of railroad on which the mails are transported.

**INDIAN POPULATION OF THE U. STATES.**—The whole number of Indians within our territorial limits is believed to be, from the best data in the Interior Department, about 325,000.

The tribes of Cherokees, Choctaws, Chickasaws, and Creeks settled in the territory set apart for them west of Arkansas, are rapidly advancing in education and in all the arts of civilization and self government; and we may indulge the agreeable anticipation that at no very distant day they will be incorporated into the Union as one of the sovereign States.

✂ The Sacramento Valley Railroad carried 82,452 passengers during the past year, and netted fifty-five thousand dollars over and above all expenses.

✂ The ditch owners of California and the Grand Trunk Railroad Company are going to make a joint effort in the present congress for land grants.

#### RAILWAYS OF THE UNITED KINGDOM IN 1856.

(Continued.)

The following line which had been opened as a single line was converted into a double line, viz.:—

The London, Tilbury, and Southend, between Tilbury and Leigh, 19 miles 44 chains.

Your Lordships approved of four agreements under the special acts of the railway Companies, by which established Companies were authorised to work the line of Companies owning short lines just constructed, viz.:—

The Scottish Midland Junction Railway Company was empowered to work the Perth and Dunkeld Railway.

The Stockton and Darlington Railway Company was authorised to work the Darlington and Barnard Castle railway.

The North British Railway Company was empowered to work the Jedburgh and the Selkirk and Galashiels railways.

And the six following railway Companies, whose railways were opened during the year, have entered into agreements or working arrangements with other Companies, under the provisions of their acts of incorporation, viz.:—

The Stamford and Essendine with the Great Northern Railway Company; the Ayr and Dalmellington Railway Company; and the Ayr and Maybole Railway Company, with the Glasgow and South Western Railway Company; the Crieff Junction Railway Company with the Scottish Central Railway Company; the Carlisle and Silloth Bay Railway Company with the Port Carlisle Railway Company; and the Staines, Wokingham, and Woking Railway Company with the London and South Western Railway Company.

It has become a very general practice for railways which are subsidiary to the lines of existing railway Companies, and which have been constructed by independent Companies, to be worked by the existing larger Company. This mode of working is advantageous to both parties and generally to the public, because these agreements create for the time that identity of interest which is created by an amalgamation, whilst at the same time the existence of the local Company provides for the interest of the district being better cared for than it would probably be if the small lines were entirely merged in the larger Company.

In six cases your Lordships were called upon by parties interested to interfere in regulating the use of level crossings; the particulars of five of these cases will be found in the Appendix; and in the sixth, an order was issued to the Great North of Scotland Railway Company, requiring them to keep the gates closed across the railway instead of across the road at a level crossing of a street in Aberdeen.

An application was made to your Lordships by the Marchioness of Londonderry under the provisions of the Sunderland Dock Act of 1855, for an order to compel the Company to afford certain accommodation at the docks for shipping coals. After a report from one of the inspecting officers of this department, your Lordships issued an order to the Company defining the accommodation to be afforded.

Your Lordships received memorials from towns interested, praying that the London and South Western Railway Company should be compelled, under the 30th clause of the Act 8 and 9 Vict. cap. 93, to lay a double line of rails on the Southampton and Dorchester railway.

This act requires that when the receipts on the line, on the average of three years, equal £65,000 per annum, the Company should, if called upon by the Board of Trade to do so, lay a double line.

It was not, however, distinctly shown that the receipts of the Company had reached the specified sum, and under the circumstances of the case your Lordships were satisfied with the



undertaking of the Company to lay a second line upon 20 miles of the railway.

The following railway Companies submitted their bye-laws for approval during the year 1856, all of which, after some correspondence and modification (with respect to some of them) were approved, viz., the Ayr and Dalmellington, the North British, the Dundalk and Enniskillen (amended bye-laws), the Inverness and Nairn, the Selkirk and Galashields, the Staines, Wokingham, and Woking, the Coleford, Monmouth, Usk, and Pontypool, the Whitehaven, Cleator, and Egremont, the Limerick and Foynes, the Jedburgh, the Darlington and Barnard Caste, the Stamford and Essendine, the West End of London and Crystal Palace, and the Mid Kent.

Eleven applications were received during the year for the appointment of an umpire under the Lands Clauses Consolidation Act to settle cases of disputed compensation between railway Companies and proprietors of lands.

In three cases your Lordships have appointed arbitrators under special railway acts. One being under the Waterford and Kilkenny railway amendment Act (1851), 14 and 15 Vict. cap. 141, s. 10, which provided for the appointment of an arbitrator by the commissioners of railways, to determine any dispute which might arise between the Waterford and Limerick and the Waterford and Kilkenny Railway Companies, with respect to the amount expended by each Company in constructing the joint line between the junction at Dunkitt and Waterford;

a second under the Leeds, Bradford, and Halifax Junction Railway Company's Act, 15 and 16 Vict. cap. 118, s. 43, which provided for the appointment of an arbitrator to determine any difference which might arise between that Company and the Lancashire and Yorkshire Railway Company, with respect to the use by the former Company of a portion of the Lancashire and Yorkshire railway; and the third under the Staines, Wokingham, and Woking Railway Company's Act, 1853, to settle any differences which might arise between that Company and the South Eastern Railway Company, as to the tolls, charges, or other consideration to be paid by the former to the latter Company for the use of a portion of the Reading, Guildford, and Reigate Railway.

The length of new line reported to be in course of construction on the 30th June, 1856, was 963 miles; of these about 208 miles were opened before the 31st December, 1856.

The number of persons employed on the 30th June upon the railways in course of construction amounted to 36,473, being on the average 37.87 per mile.

With the view of affording some measure of the comparative progress of railway enterprise, the following table has been prepared, showing the number of miles of railway in course of construction in each year since 1848, and the number of persons employed thereon, together with the amount of money received and the number of miles of railway opened during each year:—

Year.	Lines in course of construction.			Year.	Money raised by shares and loans.	Miles of railway opened during the year.
	Miles.	Number of persons employed.	Average number employed per mile.			
1st May, 1849...	2,958	188,177	63.6	—	—	—
30th June, 1849...	1,504	103,816	69.0	During 1849	29,574,719	869
29th June, 1850...	864	58,884	68.15	" 1850	10,522,967	625
30th June, 1851...	734	42,938	58.49	" 1851	7,970,151	269
" 1852...	738	35,935	49.69	" 1852	15,924,783	416
" 1853...	682	37,764	55.36	" 1853	9,158,835	350
" 1854...	889	45,401	51.07	" 1854	12,453,374	368
" 1855...	880	34,546	43.80	" 1855	11,514,490	243
" 1856...	963	36,473	37.87	" 1856	11,192,310	421

The length of line open for traffic in the United Kingdom on the 30th June, 1856, was 8,506 miles,

and the number of persons employed thereon amounted to 102,117 persons, or 12 per mile.

Year.	Lines open for traffic.			Stations.	
	Miles.	Number of persons employed.	Average number employed per mile.	Number.	Number per mile.
1st May, 1848.....	4,252	52,688	12.3	1,321	.31
30th June, 1849.....	5,447	55,968	10.2	1,850	.33
29th June, 1850.....	6,308	60,325	9.56	2,039	.32
30th June, 1851.....	6,698	63,563	9.49	2,107	.31
" 1852.....	7,076	67,601	9.55	2,253	.31
" 1853.....	7,512	80,409	10.7	2,463	.32
" 1854.....	7,803	90,409	11.59	2,410	.30
" 1855.....	8,116	97,952	12.7	2,798	.34
" 1856.....	8,506	102,117	12.	2,963	.35

#### TRAFFIC.

In the appendix will be found tables exhibiting the progress of traffic upon railways since the year 1849 inclusive.

The total number of passengers conveyed on railways in 1856 amounted to 129,347,592, against 118,595,135 conveyed in 1855, the number conveyed per mile of railway opened being 15,213 in 1856, against 14,503 in 1855.

The receipts from passengers amounted to £10,153,745 in 1856, against £9,525,205 in 1855, the receipts per mile being £1,194 in 1856, and £1,164 in 1855.

From tables it appears that in England and Wales the average fare of a first-class passenger was 2-11d. per mile in 1852, and 2-07d. per mile in 1856; that in 1852 the receipts per first-class passengers were 54-96d., and in 1856 they had diminished to 43-30d., but that the total receipts per mile from first-class passengers had increased from £379 to £411. The average fare per mile of second-class passengers was 1-43d. in 1852, and 1-44d. in 1856; the receipts per passenger diminished from 22-32d. in 1852 to 20-45d. in 1856; the total receipts

per mile being nearly constant, viz., £471 in 1852, and £476 in 1856. The average fare per mile of third-class passengers was .87d. in 1852, and .83d. in 1856; the receipts per passenger were 12-48d. in 1852, and 11-66d. in 1856; the total receipts per mile having increased from £350 in 1852, to £448 in 1856.

In Scotland the average fare of first-class passengers was 1-97d. in 1852, and 1-70d. in 1856; the receipts per passenger were 42-96d. in 1852, and 33-48d. in 1856; the receipts per mile having been £151 in 1852, and £202 in 1856. The average fare of second-class passengers was 1-51d. in 1852, and in 1856 it was 1-54d.; the receipts per passenger were 22-08d. in 1852, and 21-09d. in 1856; and the receipts per mile decreased from £177 in 1852, to £149 in 1856; the actual receipts being about the same, viz., £171,992 in 1852, and £171,588 in 1856. The average fare for third-class passengers was .77d. in 1852, and .85d. in 1856; the receipts per passenger having increased from 10-8d. in 1852, to 11-05d. in 1856; the receipts per mile having also increased from £328 in 1852, to £381 in 1856.

In Ireland the average fare of first-class passengers was 1-72d. in 1852, and 1-82d. in 1856, the receipts per passenger having been 36-48d. in 1852, and 36-80d. in 1856; and the receipts per mile £150 in 1852, and £155 in 1856. The average fare of second-class passengers was increased from 1-31d. in 1852 to 1-42d. in 1856, and the receipts per passenger raised from 16-56d. in 1852 to 18-04d. in 1856, the receipts per mile having been £245 in 1852, and £236 in 1856. The average fare per mile of third-class passengers was .82d. in 1852, and .92d. in 1856; the receipts per passenger were increased from 12-24d. in 1852, to 16-02d. in 1856; but the receipts per mile decreased from £259 in 1852, to £236 in 1856.

From these figures it would appear, that as regards the first-class passenger traffic in England the fares have been diminished, and that the receipts per passenger have also decreased, whilst the receipts per mile have increased. As regards the second-class traffic in England, the fares have been slightly increased, and the receipts per mile have not varied much. In the third-class traffic, which includes a large amount of excursion traffic, the average fares were diminished and the receipts per mile largely increased.

In Scotland the fares of first-class passengers have been diminished, and the receipts per mile have increased; as regards the second-class traffic the average fare has been increased; the actual receipts are about the same as in 1852, whilst the receipts per mile have diminished; the average fare for third-class passengers has been increased, and the receipts per mile have also increased.

In Ireland the average fare per mile and the receipts from each class of passengers have increased, but the receipts per mile, with the exception of the first-class, have diminished.

The receipts from goods, cattle, minerals, parcels, &c., in 1856 amounted to £13,011,748, against £11,982,394 in 1855, which represents £1,530 per mile in 1856, compared with £1,465 per mile in 1855.

The total receipts from goods, cattle, minerals, parcels, &c., may be divided as follows, viz.: £7,685,379 was for the conveyance of 23,823,931 tons of merchandise, £3,585,951 was for the conveyance of 49,938,675 tons of minerals, £517,786 for the conveyance of 10,450,175 heads of live stock, and £1,222,628 for the conveyance of parcels, &c.

Whilst in 1849 the proportion of the passenger traffic to the goods traffic was as 53 to 47, in 1856 the proportion of the passenger traffic to the goods traffic is as 44 to 56.

The total receipts from all sources of traffic have amounted in England and Wales to £19,728,311, or £3,120 per mile, in 1856, against £18,363,869, or £2,978, in 1855; in Scotland to £2,319,217, or £2,022 per mile, in 1856, against £2,144,398, or £2,003 per mile, in 1855; and in Ireland to £1,117,965, or £1,092 per mile in 1856, against £999,832, or £1,060 per mile, in 1855. The aggregate receipts from all sources of traffic for the whole kingdom having been £23,165,433, or £2,724 per mile, in 1856, against £21,507,599, or 2,629 per mile, in 1855.

It would appear that the average working expenses of railway Companies per mile of railway open, have increased in England and Wales from £1,352 per mile in 1854 to £1,531 in 1856; in Scotland from £961 in 1854 to £970 in 1856; but that in Ireland they have decreased from £465 in 1854 to £427 in 1856.

The proportion which the working expenses have borne to the receipts has been 49 per cent in England and Wales as compared with 48 per cent in 1855; 47 per cent. in Scotland as compared with 49 per cent. in 1855; and 39 per cent. in Ireland as compared with 41 per cent. in 1855; the general average being 47 per cent. upon the gross receipts, as compared with 48 per cent. in 1855.



The expenditure appears to be divided under the several heads as follows, viz., maintenance of way, 15 per cent.; locomotive expenses, including repairs of rolling stock, 39 per cent.; traffic charges, 26 per cent.; miscellaneous, including police and watchmen, compensation, &c., 13 per cent.; rates and government duty, 7 per cent.

These results are derived partly from the returns of traffic furnished by railway Companies to this department, and partly from the half-yearly statement of the railway Companies. Tables which exhibit this information more fully, as well as the receipts and expenditure per train per mile, will be found in appendix No. 6, together with a comparative table for the years 1854, 1855, and 1856. This information is only approximate, because the very great difference in the forms in which the several railway Companies make up their returns, prevents the possibility of giving it with perfect accuracy.

[TO BE CONTINUED.]

### MONETARY AND COMMERCIAL.

To-day is the last day of the year 1857, and we believe most business men will agree that they do not wish to pass through another season marked with the vicissitudes of the one now over. A financial crisis so unexpected, so apparently impossible to occur when every thing indicated unprecedented prosperity, when the farming and the manufacturing interests were apparently in so healthy a condition, when business houses generally deemed themselves safe from calamity, has, perhaps, never before disturbed the financial horizon. The event, which lighted the train that was to explode the commercial magazine, the character and circumstances attending the failure of those who have failed, and the past and present condition of those who have so far weathered the storm, stamp the crisis of 1857 as a remarkable one in the annals of financial revolutions. It will, however, have its benefits. Its reverses and misfortunes have been great enough to warrant corresponding blessings. It will, in some measure, put a stop to the extravagance of living, and consequent sapping of the vitality of society, that would inevitably follow the introduction of European customs, so surely gaining ground in many of our eastern cities. The youth of New York, Boston, and Philadelphia, were growing up a degenerate and dissipated race, unfit to enjoy prosperity, and more unfit to struggle with adversity. The storm which has devastated the land, will compel many a one who formerly revelled in the mist enervating luxuries, now to practice the manly virtues of industry, economy and perseverance, and will make them better citizens as well as better members of the social circle. Business will be reconstructed. The system of long credits abolished, and things return to what they should have always been—a cash business. The commercial, industrial, and social atmosphere of our country will be improved, though the storm has been pitiless and unsparing.

The market for money during the week has been active. Preparations for the great payments of the beginning of January have created an active demand, and those who have money to loan have found no difficulty in placing it at outside rates.

In the eastern cities we notice a similar state of things. Though money in money is easy compared to what it was two months ago. Several of the New York banks have declared dividends. Stocks are inactive. Prices are, however, slowly recovering.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**  
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.  
Jy 27. RICHARD NORRIS & SON.

## IRON BOILER FLUES. PASCAL IRON WORKS.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ¼ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,

PHILADELPHIA.

[206]

RAILROAD IRON.

**LOCOMOTIVES.**

4,000 Tons rails, 53 to 61 lbs. per yard 200 tons  
rails 49 lbs. per yard. 1,000 tons rails 55 lbs.  
per yard. Also: several Locomotives of best manufac-  
ture, of any required weight and adapted to any gauge  
for sale by

Feb. 7. '56-2m.]

A. H. GOODMAN & CO.,  
No. 7 Wall st., N.

## Reliable Books for Travelers.

DINSMORE'S

R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains  
Official Time Tables with References; Combined  
Railroad Routes; Steam Navigation; Gazetteer. Price  
25 cents, with Large Map

DINSMORE'S THIRTY MILES AROUND N. YORK,  
By Railroad, Steamboat, Stage, Express and Telegraph;  
or how to get in and out of the Metropolis. An alpha-  
betical list of 1000 places. Price 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hoppin. Part First now ready, with  
spicy articles on Peter Funk Shops—Patent Safe Swin-  
dlers—Pick Pockets, both sexes—Garroters and High-  
waymen—Gamblers and Gambling Houses. Price only  
10 cents.  
DINSMORE & CO.,  
9 Spruce street, New York

## INDIANAPOLIS,

Terre Haute, Lafayette, Chicago,  
AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI

SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between  
Cincinnati and Indianapolis.

**THREE PASSENGER TRAINS!**

Leave Cincinnati Daily (Sundays excepted), from the  
foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafay-  
ette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in  
Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indi-  
anapolis at 1.30 A. M.

The above Trains make close connections at Indian-  
apolis, Lafayette and Chicago, with Trains for Terre  
Haute, Springfield, Rock Island, Galesburg, Keosauha,  
Lafayette, Jackson ville, Danville, Burlington, Milwau-  
kee, Mattoon, Naples, Galena, Quincy, Prairie du Chien,  
St. Paul, Pana, Peoria, Danville, Racine, Decatur,  
Bloomington, La Salle and Waukegan; also, for Peru,  
Fort Wayne and Logansport; and all the Towus and  
Cities in the West.

Be sure you are in the Right Ticket Office before  
you purchase your Tickets, and ask for Tickets

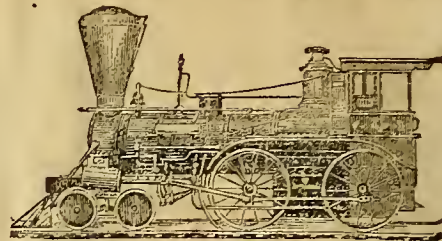
VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the  
Company's Ticket Office, under the Spencer House,  
corner Broadway & Front, where all necessary Infor-  
mation can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House,  
E. F. FULLER, Ticket Agent; No. 2 Burnet House, A.  
HAMILTON, Ticket Agent. Office hours from 4 A. M.  
to 9 P. M. H. C. LORR, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive  
equal in efficiency and durability to the best Eastern  
manufacture. Also, Shaping and Slotting Machines  
suitable for railroad shops. Also, all kinds of heavy  
forging and casting done at short notice. Also, bolts for  
bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted  
Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and  
Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS**

From the best Manufacturers, and at their prices. Ca  
Hand, and Signal Lanterns.

**Cotton Duck for Cr Covering,**

Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight  
Car, and Switch Locks, Door Knobs and Butts. Brass  
and Iron Wood Screws. Brass and Silver plated Trim-  
mings for windows and Seats. Varnish, Coach Japan  
and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and  
Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Con-  
ductors' Badges and Baggage Checks. Iron, Bronze and  
Brass Hat Hooks. Ventilators and White Metal Rings.  
And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,  
Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.

†cc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**



WOULD respectfully invite  
the attention of RAILROAD  
Companies, Manufacturer  
Distillers, Miners, and the pub-  
lic generally to these Pumps  
as the best Pump now in use  
and acknowledged by all who  
have used them to be perfect—  
are simple in their construc-  
tion, compact, durable and not  
likely to get out of order; well  
adapted for Steamboats, Rail-  
road Water Stations, Distille-  
ries, Breweries, Furnaces,  
Mines, Rolling Mills, Paper  
Mills, Factories, Wells, Cis-  
terns, Stationary Fire Engines, Garden Engines and for  
all purposes where a Pump can be used. Also, for forc-  
ing a large body of water to a great height or distance  
rapidly.

Also, McGowan's Patent Ball Valve Pump, designed  
for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings  
Lead, Copper and Gas Pipe furnished at the lowest mar-  
ket prices.

Full and perfect satisfaction guaranteed in all cases,  
when properly put up according to directions.

Orders thankfully received and promptly filled at the  
shortest notice.

W. L. (The highest prize) awarded  
Pumps steam Pumping Engine at the late  
Ohio Mechanics' Institute. June 18, 1855 F1



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rst.	When Payable.	Where Payable.	When Due.	Description of Bond.	Qu't of Bonds	Name of Company.	Qu't of Stock	Ln of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	171	Albion, Leno. & Hampshire		171	6,000,000.00				
498,800	6			1862-3	2d "	54.55	Androscoggin & Kennebec		54.55	1,400,000.00		209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.									4 pr. ct. 6m
52,645				now		86.5	Atlanta and LaGrange		86.5	1,000,000.00	129,000.00	258,123.74	173,780.74	8 pr. ct.
500,000	6			1860	"	12.5	B'gr, Old T. & Milford		12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53
500,000	7		N. Y.	1866	1st mortgage.	44 5-8	Boston & Worcester		44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,052.03	180,000 4.6m
300,000	7			1857-9-62	Income.		Buffalo & State Line			1,300,000.00				5 pr. ct. 6m.
200,000	7			1864	Domestic.		"							
577,187	6			1872	4th mortgage.		Central Ohio							
192,200	7			1874	2d "	43	Champaign & St. Lawrence		43	1,872,800.00	1,001,987.00	168,200.00	77,700.00	10 per ct.
380,000	7				Domestic.	110	Ch'lt' & South Carolina		110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
1,440,000	6-7-8		N. Y.		1st mortgage.	138	Ch'go, Burl'ng'n & Quincy		138	3,746,900.00	3,114,000.00	1,095,183.00	571,725.23	15 pr. ct. 6m
1,300,000	8				2d "		"							
374,000					Convertible.		"							
1,300,000					1st mortgage.	132	Chicago, Fulton & Iowa		132	1,761,149.16	2,241,500.00	221,491.96		
532,000					2d "		Cin. Wil'ng'n & Zanesville							
104,000					3d "		"							
305,500					Income.		"							
540,000	6				Convertible.	139	Cleveland Col. & Cin.		139	4,741,920.00		1' 3' 754	700,894	6 per cent.
43,000				1873	1st mortgage.	85	Cleveland & Mahoning		85	1,500,000.00				
400,000	7			1864	2d "		"							
1,000,000	7			1873		52	Cumberland Valley		52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	52	Dayton & Cin. short line		52	1,000,000.00	1,000,000.00			
350,000						93 6-10	Eastern Railroad		93 6-10	3,345,300.00		665,578.79	283,687.84	\$234,133
740,000	7				1st mortgage.	130	East Ten. & Virginia		130	235,450.00		30,897.30	19,692.30	
82,000	10			1869	1st "	20	Essex Railroad		20	700,000.00				
400,000	7			1861	2d "	109	Evansville & Crawf'd'vle		109	2,228,657.50		243,970.42	136,061.90	\$133,281.45
200,000	10			1864	1st mortgage.		The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,837.81	3 per cent.
100,000	6					33	Fox River Valley		33	200,000.00				
100,000	6				1st "	15	Fair Haven Branch		15	300,000.00		50,331.33	14,822.45	\$166,340.00
300,000	7					233	Georgia R.R. & Banking Co.		233	4,156,000.00		1,068,202.59	357,689.42	\$166,340.00
4,000,000	6 1-9			1853	1st "	20	G't Falls & Conway R.R.		20	2,000,000.00		27,576.69	14,207.07	
2,000,000	7			1869-70	1st "	281 1/2	G't West'n R.R. of Can.		281 1/2	4,191,550.00		2,068,836.00		8 pr. ct.
1,812,009	7			1860	1st "	74	Housatonic Railroad		74	2,000,000.00		339,196.50	176,329.93	
12,885,000	7			1875	3d mortgage.	144	Hudson River		144	4,000,000.00		1,924,382.44	718,037.40	
4,115,000	6			1876	1st "	144	"		144	4,000,000.00				
3,000,000	7			1860	Freeland.	704	Illinois Central R. R.		704	18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.
600,000	7				1st mortgage.	72 4	Indiana Central		72 4			354,871.00		3 pr. ct.
700,000	7	Nov. 1		1862	2d "	13	Iron R. R.		13	123,700.00				
50,000	7	Jan. & July 1			1st mortgage.		Kentucky Cen. 2d Div.			719,500.00				
700,000	7					32	Knoxville & Kentucky		32	166,000.00		23,233.59	14,233.59	
218,000	7			1866	1st "	184	Laurens (S. C.) R. R.		184	300,000.00		50,234.71	14,149.13	\$8,000
1,000,000	7			1873	2d "	12 35	Louisville & Nashville		12 35	2,697,090.00		587,236.57	162,277.50	10 pr. ct.
2,000,000	6				1st "		Lowell & Lawrence			2,697,090.00				
2,500,000	7			1868	2d "	26	Mad River & Lake Erie		26	1,000,000.00				\$24,000
2,000,000	7			1874	2d "		Manchester & Lawrence							
60,000	7 and 8			1867	1st "	27	Marietta & Cincinnati		27					
420,000	8				1st mortgage.	30	Mexican Gulf R. R.		30	600,000.00		253,498.96	162,802.24	7 pr. ct.
329,000	8			1881	1st "	32	Milwaukee & Horicon		32	922,500.00		194,752.42	55,501.74	2 pr. ct. 6m
320,000	8			1868	2d "	32	Mineral Point R. R.		32	2,697,090.00		7,707,348	3,609,481	3 pr. ct. 6m
6,000,000	6			1884	1st "	497	Mobile & Ohio		497	10,000,000.00		324,891.57		
500,000	7			1869	1st mortgage.	15	Nashua & Lowell R. R.		15	600,000.00				
8,356,000	6	May & Nov.	N. York		Con. till 1859.	55	New Haven & North'n		55	23,067,400	14,763,897	7,707,348	3,609,481	
32,892,600	6	June & Dec.	N. York	1864	1st mortgage.	123	New York Central		123	5,717,100.00		1,040,393.26	64,478.71	\$37,692.30
1,000,000	7			1873	2d "	50	N. Y. & Harlem R. R.		50	1,580,000.00			51,544.40	
926,000	7			1863	1st "	66	N. Y. Prov. & Boston		66	1,700,000.00		120,571.50		
411,700	6				2d "		N. Lon. Wil'lm'tu & Pal.							\$25,000
500,000	7					5	Pontchartrain R. R.		5	600,000.00		116,795.00	366,118.80	7 pr. ct.
300,000	8					62 1/2	N. O., Opelousa & Gr't West.		62 1/2	3,000,000.00		1,007,666.48		
1,500,000	6			1873	1st mortgage.	103 1/2	N. Y. & New Haven		103 1/2					
2,000,000	6			1873	2d "		North Western Va. R. R.							
1,500,000	7			1875	3d "		"							
3,000,000	7			1859	1st mortgage.	118	Northern (N. Y.) R. R.		118	2,000,000.00		600,000.00		7 pr. ct.
419,300	5					19 2	North Missouri R. R.		19 2			25,176.74	88,459.56	2 1/2 pr. ct.
221,800	6			1877		60	Norwich & Worcester R.R.		60	2,111,500.00		304,236.33		
				1860			"							
						94	Ogd'sburg, Claytn & Rome		94			289,680.10	337,875.93	5 pr. ct.
400,000	6			1866	1st mortgage.	88 3	Ontario, Simcoe & Huron		88 3	2,987,500.00		276,539.02		
1,200,000	7			1875	2d mortgage.	47	Orange & Alexandria R.R.		47	1,500,000.00				
300,000	8			1873	1st "		Peoria & Bureau Val. R. R.							6 pr. ct.
300,000						28 1-5	Philadelphia & Trenton		28 1-5	1,000,000.00				
350,000	6			1861	1st mortgage.	47	Portsmouth & Concord		47					
800,000	7			1864 to 1874	1st "	76	Potsdam & Watertown		76	2,000,000.00		68,525.42		
1,260,000	6			20 years.	1st mortgage.	62 1/2	Rutland & Washington		62 1/2	950,000.00				
						86	St. Louis & Iron Moun. R.R.		86	6,000,000.00				
						168 3/4	Salem & St. Louis R. R.		168 3/4	400,000.00				
					1st mortgage.	116	Snd'sky, Mansf'd & Newk		116			19,050.64		
500,000	6				1st "	26	Sullivan Railroad		26	500,000.00		75,246.08		
250,000	6				2d "		"						17,378.08	
1317,000					1st mortgage.	145	Tennessee & Alabama		145			39,586.44		11m. 12 pr. ct.
						73	Terre Haute & Richmond		73	1,294,450.00				
300,000				1861	1st mortgage.	242	Toledo, Wabash & Western		242	1,000,000.00				
128,000				1840	2d "		Troy & Boston							
262,500				1875	3d "		"							
2,500,000					1st, 2d, 3d "	46	Vicksburg & Jackson		46	3,000,000.00		222,048.60	165,076.04	2 pr. ct.
						215	Virginia & Tennessee		215					
526,000	7				1st mortgage.	31	Westchester (Pa.) R. R.		31	165,000.00				
200,000	7				2d "	171	Wilmington & Manchester		171					
						32	Winchester & Potomac		32					
						45 69	Worcester & Nashua		45 69					



# GENERAL RAILWAY SUPPLY AGENCY. SNOOK & HILL'S PATENT LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

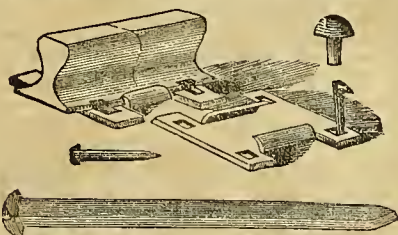
**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

**GREAT WESTERN  
Railroad Chair and Spike Works**



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of **Wrought Chairs, Hook and Flat Head Railroad Spikes** of all patterns, **Boiler Rivets, Bolts** of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.  
Feb 28 CORBY, GOSSIN & CO.

**Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.**

VIA LAWRENCEBURG,

IN connection with the **Ohio and Mississippi Railroad**. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.

**APPLEGATE & CO.,**  
Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, O.

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
**JAMES H. MORLEY**, New York City.  
**OR SUMNER SMALL**, Boston, Mass.

F. W. RHINELANDER.  
**JAMES A. BOORMAN.** EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,**  
**RAILWAY AGENTS**  
AND  
**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duocan, Sherman & Co., Messrs. Stillman, Allen & Co.  
Feb 5-17

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

**CHARLES ELLET, Jr., Civil Engineer.**  
No. 298 H Street, Washington, D. C. apr12

**W. G. HYNDMAN'S**



**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others who want of Portable Forges will address  
**W. G. HYNDMAN,**  
ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**

**Mechanical Engineer,**

AND

**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.  
Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions.  
oc23

**RAILROAD IRON.**

**1500 TONS RAILS,** 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

**THEODORE DEHON.**  
Feb 5-17 10 Wall st., near Broadway, New York.

**ALLEN & NOYES'**  
**METALLIC PACKING.**

**To Whom it May Concern.**

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. Jy 23-1m

**D. M. CARHART,**  
**TURN-TABLE BUILDER.**

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whoever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,  
Respectfully Yours,

**D. M. CARHART,**  
Box 1831, Cleveland, Ohio.  
oct29-6m

**T. F. RANDOLPH & BRO.,**  
**Mathematical Instrument Makers,**

**N. W. Cor. 5th & Walnut sts.,**

**CINCINNATI, O.**



## Most Direct Route to the East. BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and  
Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH  
PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

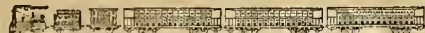
**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads. For the West and South, as above.

E. J. PECK, Supt Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1857.

November 30.

1857.

857.

Summer Arrangement.

185

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.  
THROUGH TICKETS VIA.

WHEELING,  
STEBENVILLE,  
PITTSBURGH,  
CLEVELAND,  
DUNKIRK,  
BUFFALO,  
NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

### FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Cleveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

### FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office south-east corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent.

### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. EABCOCK,

Ag't Cin. and St. Louis Omnibus L  
Office No. 2 Burnet House.

'an2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,

Jan 8 ly 119 Walnut st., Odd Fellows' Building

## Cincinnati, Hamilton & Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

### THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPOUT  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPOUT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for **Night Express** on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

### "STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia, arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS** Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

### FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

### RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:3, 6:35 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

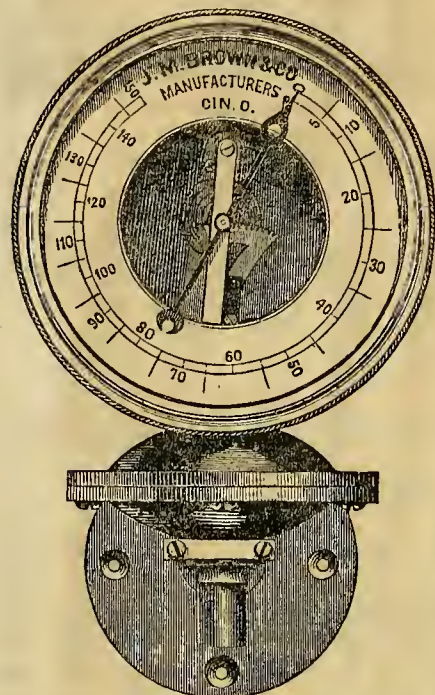
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agents



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN &amp; CO.,

mar-26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to

### DRILL THE TUBE-PLATES

and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER &amp; SON,

82 PLATT STREET, New York.

## The Great Arnold Secret Discovered at Last BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. Record.—For Ledgers and Records only. Mercantile.—For Books, Letters, and General purposes Copying.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial

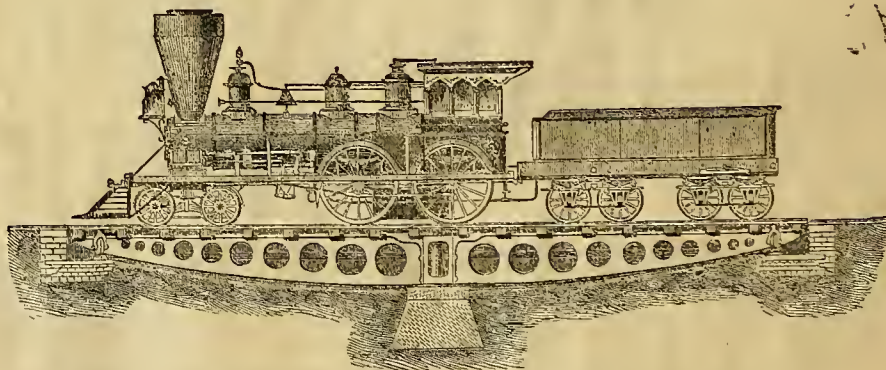
Yours truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers & Co. —LATE— BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING and SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, Jr.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JANUARY 7, 1858.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " per month .....	3 00
" " six months .....	12 00
" " per annum .....	20 00
One column, single insertion .....	4 00
" " per month .....	10 00
" " six months .....	40 00
" " per annum .....	80 00
One page, single insertion .....	10 00
" " per month .....	25 00
" " six months .....	110 00
" " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 46.

#### EDITORIAL.

Early History of Railroads—N. Y. & Erie.....	685
Bill for the Organization of the Territory of Arizona.....	686

#### RAILROADS.

Southern Pacific R. R. Co.....	687
Report of the Railroad Commissioner of the State of Tennessee.....	688
Railways of the United Kingdom in 1856.....	691

#### MISCELLANEOUS.

Losses of Life and Property in 1857.....	689
Arizona.....	689

#### MONEY AND STOCKS.

Monetary.....	692
New York Stock Sales.....	692

### BALTIMORE AND OHIO RAILROAD.

The official report of the business of the road shows the revenue for the month of November to have been as follows:

	Main Stem.	Wash. Branch.	Total.
For Passengers..	\$ 61,550 37	\$ 3,440 25	\$ 64,990 62
For Freight.....	271,016 41	10,481 76	281,498 17
	\$332,566 78	\$33,922 01	\$366,488 79
	Main Stem.	Wash. Branch.	Total.
November, 1857..	\$332,566 78	\$33,922 01	\$366,488 79
November, 1856..	389,504 86	32,713 59	422,218 45
Decrease.....	\$56,938 08		\$56,938 08
Increase.....		\$1,208 42	\$1,208 42

#### Bridal Train.

A rather interesting incident in railroading occurred on January 1, 1858. The first train of the present year on the Sandusky, Mansfield and Norwalk Railroad carried no less than six bridal parties. There will be a good time for railroads as well as parsons out of the wedding business, if this continues.

☞ The amount of lead received at Chicago, from the Galena region of the North-west, in 1854, was, in pounds, 4,086,809; in 1855, 9,915,850; in 1856, 6,627,506; in 1857, 4,356,207.

☞ The Terre Haute and Richmond Railroad has declared a semi-annual dividend of six per cent., payable January 8, at the Farmers' Trust Company.

VOL. 5.—NO. 45.

### EARLY HISTORY OF RAILROADS.—N. YORK AND ERIE.

Recently we gave a portion of the early history of the Baltimore & Ohio Railroad, illustrative of the advance in Railroad principles. We shall now renew the same subject, as practically illustrated, by the history of the New York & Erie Road. This work was, in some respects, very remarkable in its inception. Its projectors undertook to unite, commercially, the waters of Lake Erie and the Hudson, by a road which should cross more river valleys, or deep cuts, than any railroad in the world. Leaving out of view numerous secondary streams, the road must cross, or pass in and out of the valleys of the Delaware, the Susquehanna, the Chemung, the Genesee, and the Allegheny rivers. These were large streams, and between each were lofty spurs of mountains. The summit between the Chemung and the Genesee is 2,000 feet in height, and Chautauque Lake—one end of which is only ten miles from Lake Erie—is 1,300 feet above it! Thus, there was presented some of the greatest engineering difficulties, and most expensive work, which a Railroad could possibly encounter. Yet, (be not astonished reader) Judge Wright, Civil Engineer of New York, estimated the cost of making this entire Road—without machinery—at five millions of dollars! Among his assistants was that accomplished and judicious engineer—Charles Ellet, Jr. It was not the engineers that were in fault. It was the fault of the imperfect knowledge of the science of railroad making at that time—1834. The Erie Railroad has actually cost over thirty-five millions, or seven fold the original estimate! It may be said, that a great deal has been absorbed in discounts, interest, bad management, &c., and that the road has been made on a more expensive plan. All this is true; yet the actual work, essential to the business of the road, has cost four-fold the original estimate, made upon any plan. The reason is, that the Road, built on the original plan, could not have done one-fourth its present business, nor would it have been safe, nor could it have gone at the same speed. In one word, it would not have been the same machine, nor adequate to the same purpose. The demands upon railroads have greatly increased. The power of the railroad—as a machine—has greatly increased, and science has multiplied its capacity in every way.

It may be well to contrast some of the estimates and results of this road. The estimate of Judge Wright was:

Total graduation.....	\$4,631,469
Engineering—3 per cent.....	130,791
Total cost.....	\$4,762,260

Here is 483 miles of road to be made for less than \$10,000, or only one-fourth part of what the English rights of way cost! If our railroad managers could only realize

such golden dreams as this, how happy they would be!

But, hear what the learned engineer said this outlay would do. "This sum," said he, "will grade, and bridge over rivers the whole road for two tracks, and put down one track, which is all that ought to be done until the road is traveled nearly its whole length, and this also includes the Inclined Plane and steam power, to operate upon it, and also, long and expensive wharf into the Hudson River."

We see here that an *inclined plane* again is contemplated, and it was by such means that much of the expense of grading was avoided. Nevertheless, when the work came actually to be done, the grading itself, over those high ridges and valleys, through hard material, cost at least three times what was contemplated.

With this estimate and plan before them, the New York Legislature made a subscription to the Erie Road of \$3,000,000, and in 1836 the work was undertaken under the Presidency of JAMES G. KING. Mr. King then estimated the Road by reducing grade, and adding on for contingencies—the whole cost at \$6,000,000.

Here we shall leave the early estimates to consider the ultimate cost. We take the Report made by the Company in 1854, as a fair test of its cost when completely running. The elements of the Road then were:

Stock subscribed.....	\$10,023,958
Debt, Funded and Unfunded.....	25 126,669
Total cost.....	\$35,350,627
Length of Road.....	445 miles.
Double Track.....	262 "
Cost per mile.....	\$80,000

It will be observed, that the cost was just eight-fold the estimate of Judge Wright. Let us compare some items, as reported:

Judge Wright's Estimate.	Actual Cost.
Grading.....	\$2,717,518
Iron Rails.....	1,642,200
Engineering.....	130,791
Machinery.....	3,034,452
Right of Way.....	1,194,749
Depots, Stations, &c....	1,318,000

Here we see, that the machinery, rights of way, and depots, cost more than the original estimate! We can account for the increase of iron cost, by the substitution of the T rail for the flat bar. But, we confess, it is not so easy to account for the vast difference in grading, except by what we know to be true, that the heavy rock excavation was vastly greater than was supposed to be necessary.

But, there is another part of the history of this road, even more surprising than the difference between the estimates and the cost. This is the difference in the receipts. Nobody could have imagined in the commencement of railroading, such vast accumulation of business as have actually taken place. The Erie Railroad has received some five or six millions per annum! In other words, it has received for income more than the original



estimated cost of the road. Suppose the learned doctors of civil engineering had been told, that a railroad would soon be made in this country, whose receipts would count by millions, and the very capital they were asking for the road, would not equal its income! Suppose, more than this, that they were told this road would carry over it a *freight* equal to the *then* freight of the Erie Canal! What would they have thought of such dreaming, when the engineers of the country boldly proclaimed, that railroads would carry only light freights, and would never compete with canals! In truth, among the great revolution of our time, there is none greater than that in the science and results of Civil Engineering. Our railroads are not the same things they would have been, had our engineers not advanced an hundred fold beyond the knowledge extant in 1830. Then, it was thought a railroad could not ascend possibly on a grade higher than that of fifty feet per mile. If any circuit required more than that, there must be an inclined plane and stationary engine! Then, it was absolutely demonstrated, that a railroad could *not* carry heavy freight, especially in competition with canals! If this were true, where would be the Erie Road? Where the Baltimore Road? Where the Reading Road? In fine, if the doctrines of that day were true, the best and most profitable roads in the country could not possibly pay their expenses.

Such an advance in the real science of Engineering, deserves more commendation than it has received.

#### BILL FOR THE ORGANIZATION OF THE TERRITORY OF ARIZONA.

We have received the Bill now pending before Congress for the organization of the new Territory of Arizona, some notice of which we give our readers in another column. This bill contains some remarkable features which deserve more than a passing notice from the press of our country. The first 29 sections provide for the organization of the territorial government and the appointment of its officers, and define their duties and compensation. The thirty-first section contains the following remarkable language:

"Forasmuch as by the laws of Spain made for the government of what were called the Indies, in which all Mexico was included, and also by the laws of the supreme government of Mexico, made after its separation from the mother country, it was provided that all mineral lands were reserved to the crown of Spain, or to the supreme government of Mexico, as the case might be, and were never separated therefrom by being within the limits of any grants nor intended so to be, nor by reason of any grants which had been, or could be made of any lands to any person or persons whatever; and inasmuch as no grants for mineral lands to any person or persons, or to any company of persons, forming a partnership, or to any ecclesiastical person, or corporate body, whether lay or ecclesiastical,

ever were made in absolute fee, along with any agricultural or grazing land granted, so as to separate the said mineral lands from the crown of Spain, or from the public domain of the supreme government of Mexico, and from their control; and as no mineral lands separate and apart, as such, were ever granted by the crown of Spain, or the supreme government of Mexico, to any person or persons, or company of persons in partnership, in absolute fee, but according to the uniform and stringent policy of the laws of the crown of Spain, and of the republic of Mexico, mineral lands were only allowed to be held by subjects or citizens under the special provisions that they should continue to work them by mining, and if abandoned by them, even for a short time, that they should be and were forfeited, and liable to be denounced and taken by others, with the consent of the supreme government, under like conditions and regulations as when first obtained."

The above extract gives the gist of the provisions of the bill with regard to mineral lands; and we say they are *remarkable*—remarkable under any government controlled by the Anglo-Saxon race, and especially remarkable under our own Republican institutions. This bill has the honor or the dishonor, as the case may be, of setting up for the first time during the existence of our government, the idea—tyrannical and obsolete as it is—of the inalienable right of the government to the minerals of the soil. Hitherto it has been the settled policy of our nation to endow the proprietor of the soil with all it covers, whether gold, silver, iron or coal. No distinctions have yet been recognized by the government of the United States between mineral and agricultural lands. The public domain has been regarded as belonging to the people, and alike open to all. The copper regions of Tennessee and Superior, and the lead regions of Iowa, Missouri, Illinois, and Wisconsin, with the coal and iron regions of Pennsylvania, Ohio, Maryland, and Virginia, have been open to entry and settlement, on the same terms and conditions as the prairies of Illinois and Indiana. There is scarcely a State in the Union that can not boast of its mineral treasures opened and to be opened by the hand of enterprise, under the liberal encouragements that our government has held out to the settler. We say, then, that it is remarkable that the Congress of the United States should for a moment consider the question of abandoning its settled policy—a policy which has made our nation at once happy and powerful, and the admiration of the civilized world, for the obsolete and tyrannical notions of the *Court of Spain and the Supreme Government of Mexico!*

Under the laws of Spain and Mexico, the fortune-hunter had the right to invade private property, to dig up, if need be, the garden of his neighbor, to lay open the precious ore, and he was entitled to denounce the mine he wished, no matter on whose ground he had discovered it. By our laws, private property

is secured to the owner. Our legislators have been willing to trust to the avarice of the owner for the development of the resources of his property, and the latter have very rarely been found deficient in this last of modern virtues. The universal Yankee nation believes in making the most of every thing, and mines and minerals, where they will pay for working, rarely stand idle. We see, then, nothing in the working of our national policy that would warrant a return to the old and faded notions of the "Court of Spain, or the Supreme Government of Mexico." Our national policy has developed our country—has filled it with a hardy, sturdy, law-abiding people. The policy of Spain and Mexico, involving as it does, the insecurity of property, and the uncertainty of the enjoyment of the fruits of labor, has made them what they are—the weakest of the nations of the globe—neither government nor people secure in the possession of a single privilege—the sport of fortune and the foothall of chance.

Under this policy, "mineral lands were only allowed to be held by *subjects* or citizens, under the special provisions that they should continue to work them by mining, and if abandoned by them, even for a short time that they should be, and were forfeited, and liable to be denounced and taken by others, with the consent of the supreme government, under the like conditions and regulations as when first obtained." The motive of this policy is readily understood; it was to prevent the mineral resources of the country from lying undeveloped. Apply this same rule to agriculture, and what would be the value of our farming interests? Where is the man who would invest his means in farming lands, if he were liable to be deprived of them the instant he ceased their actual cultivation? Yet such is the spirit of the law, that the American Congress is asked to pass for the government of the new territory of Arizona. We rightly said then that it was a *remarkable* law. It is more—it is anti-American—anti-democratic. It militates against the whole character of our policy and our people, and will retard the progress of this new State. We trust that Congress will not lend the sanction of its approval to any such tyrannical enactments.

But there is another consideration which should not be lost sight of in this case. The mineral resources of this territory afford the *only inducement to settlement*. There is an abundance of the finest agricultural land, with a climate surpassing that of this region, now lying unoccupied and open to settlement far nearer to civilization, and free from the border dangers incident to a region exclusively Indian, and bordering on Mexico. Settlers will not be attracted to Arizona for agricultural purposes. It is its mineral resources alone which will attract them. And



yet if the policy of this bill is adopted, this great inducement will be denied them. The minerals will be retained under a policy copied from that of the *crown of Spain and the supreme government of Mexico!* Had that policy been capable of developing the resources of that region, our government would not now have possessed it a wilderness. If our own national policy, as pursued toward every other territory in this Union, does enrich isolated individuals by endowing them with 160 acres of mineral land, it will be because they will do what the government can not do, and should not do, and what individuals will not do, unless the minerals pertain to the fee of the soil.

The mining of Arizona will be of a far different character from the mining of California. In the gold placers of California, a spade and bowl were all that the miner had to provide. He could commence his operations wherever the golden sands existed. In Arizona the mineral wealth will only be found after expensive and patient search—opening shafts and galleries, and when found will require costly operations and machinery to extract the precious metals. The mining of Arizona must be conducted in a systematic and scientific way, and will involve large outlays in the commencement. It must, in the main, be carried on by associated capital, invested in lands held in fee with the minerals pertaining to the soil, and protected by law from the intrusion of all but the owners of the fee.

It is the duty of Congress, as it should be its pleasure, to provide for the early settlement and development of its whole domain—whether mineral or agricultural, to encourage enterprise and industry with the hope of a sure and permanent reward in the security of its acquisitions. It *has been* its policy to stand aloof from the petty consideration of mineral or no mineral lands, and to dispose of its domain to actual settlers in quarter sections. This *has been* its policy. And those who have settled in Arizona—those brave men who have fearlessly encountered the hardships and dangers of a frontier life under the guarantee of existing laws, and the long settled policy of our government, have a right to enjoy the privileges heretofore granted to settlers elsewhere in our whole country. Congress has no right to deprive them of it.

The highest judicial tribunal of the United States, has already, in the case of Col. Fremont's Mariposa claim, decided that not *Spanish* but *American* law and customs should govern in our country. This decision was in accordance with the settled policy of our government, and simply affirms the rights of our people to what they own and all they own.

But is it wise in our National Legislature to adopt a policy, which, by rendering property insecure, will retard the development of this Silver State. The great want of our country is a metallic currency—a certain representative of value. This can best be acquired by the development of the resources which nature has placed in our power. California has already poured its millions into the general store. Let wise and liberal laws induce a like development of its sister State—Arizona. Let there be as great inducements to enterprise to seek out Arizona, as there is to settle Iowa or Wisconsin. Let the actual settler possess his 160 acres in security—undisturbed with the idea, that accident may give the fruit of his toils and privations to another, and then will Arizona soon fill up with sturdy settlers, whose busy hands shall convert that present wilderness into a land blooming with agriculture and rich in mineral development.

## Railroads.

### SOUTHERN PACIFIC RAILROAD COMPANY.

The Board of Directors have been investigating all the affairs of the Company, with a view to making a report.

After the organization of the Company at New Orleans, in April last, some unsettled claims existed against the Company, and the Executive Committee at New York, who knew more of these claims than the directory here, were entrusted with the duty of settling them. Rumors of fraud in these settlements and of the fraudulent issue of stock, and charges that the Executive Committee in New York were issuing stock in large quantities at one dollar a share on which five dollars a share were acknowledged to have been paid, were widely circulated, greatly to the injury of the operations and prospects of the Company. In order to satisfy the stockholders that such charges were untrue, the Executive Committee demanded an investigation of those rumors, when, after a full investigation of a committee, there was an unanimous concurrence of opinion that no frauds had been committed, and that no stocks had been sold and issued either by the Executive Committee in New York or the Company at New Orleans *under par*, and their report was concurred in by the Board of Directors. It is not necessary at this time to present a full and detailed account of everything connected with the transactions of the Company. All these particulars will be laid before the stockholders in the yearly report which will be submitted to them in due time. The Company is now believed to be in a better condition than it was at its organization in New Orleans in April last.

It will be sufficient to advert to the present actual position of the Company and its im-

mediate prospect with reference to the amount of money at the credit of "Capital Stock" for stock issued as per statement of the President, April, 1857.

The amount then represented was.....	\$2,474,790 50
To this may justly be added interest paid in stock on the above amount.....	39,345 18
Add stock issued in New Orleans.....	322,782 36

Making in all a total issue of stock as of that date to the amount of.....	\$2,336,918 04
But an agreement has been made by which a part of the assets on hand have been sold, to be paid for in the capital stock of the company, and which, when carried out, will reduce the outstanding stock to.....	2,566,354 95
In addition to which there is an amount of \$200,000, which the Board of Directors believe will be cancelled.....	200,000 00

Thus it leaves the total amount of stock issued.....	\$2,366,354 95
Making an actual reduction in stock issued to the amount of.....	460,664 00

The Company have entered into positive contracts, which will, the Board believe, insure the construction of twenty miles of the road by the 15th of February next. About twelve miles are completed, leaving only eight more to be finished; and as the eight miles are graded, and all the iron is upon the ground, two locomotives, construction cars, chairs, spikes, and every thing necessary to complete that distance, the Board have every confidence that the requirements of the charter will be complied with. Five miles in addition to the twenty above mentioned are already graded, and all the iron and other material necessary to lay the track is on the spot. As soon as these additional five miles are completed, the Company will receive 256,000 acres of land from the State of Texas. This land has already been surveyed, and reported to be of a superior quality. Messrs. J. P. Grant & Co. are under contract to grade seventy miles of road, and provision has been made for the prosecution of that work to completion. In October last, when the commercial crisis swept over the land, creating embarrassment and failures of some of the strongest houses in all parts of the Union, the company found it impossible to raise means either to pay their existing liabilities or prosecute their work. With a view to saving the charter of the company, and to induce parties to loan money to prosecute the work, at least to the extent of twenty miles, a deed of trust was executed by order of the Directors. The execution of this deed of trust had the effect of inducing parties to come forward and furnish the means, whereby the work was unimpeded in its progress, and the charter protected. Arrangements have been made by which all the debts embraced in the deed of trust are provided for, and by which the deed of trust will be cancelled.

The Executive Committee of New York having requested that said committee should be abolished, the request has been granted, and in future all contracts and engagements must be made here, subject to the action of the Board of Directors.

The transfer office is re-opened in New



York, and R. M. Stratton is appointed assistant Secretary, and is authorized to sign certificates with Edwin Post, the Vice-President of the company. Stocks may be transferred on the books of the Company, either at the transfer office in New York, or at the office in New Orleans, and new certificates obtained for old ones surrendered. Interest certificates can in all cases be issued at either office, but no holder of certificate of stock can receive his interest without the presentation of the certificate of stock on which said interest has accrued. A financial system has also been adopted by the company, by which it is believed its bonds, secured upon its lands and property, will take the highest rank among good securities, either at home or abroad, so as to enable the Company to progress without selling more stock than was ordered to be sold last spring. About \$270,000 of that amount still remains unsold, and it is not contemplated to issue any other stock.

In conclusion, it is proper to state that an instalment of fifty cents a share will fall due on the 1st Monday of January next on all stock on which \$3 50 a share has been paid.

All stock on which instalments are not paid will be liable to sale under the sixth section of the charter, a copy of which is annexed:

**SEC. 6.** The shares may be disposed of, and books opened for subscriptions thereto in such manner and on such terms as said commissioners shall determine will be for the best interest of said company; and any agreement in writing, by which any person shall become a subscriber to the capital stock of said company, may be enforced against him according to its terms; and if any subscriber shall fail to pay any amount due upon shares subscribed by him, according to the terms of his subscription, the directors may sell at auction, and transfer to the purchaser the shares of such delinquent; and if the proceeds of sale shall not be sufficient to pay the amount due on said subscription, with interest and charges, such delinquent shall be held liable to the company for the deficiency; and if the proceeds shall exceed the amount so due, with interest and charges, said delinquent shall be entitled to the surplus.

Instalments may be paid either at the office in New Orleans or at the Transfer office in New York, at the pleasure of the holder of scrip stock.

All of which is respectfully submitted.

This report was adopted by an unanimous vote.

The election of Directors is postponed to the first Tuesday in May next, and will then take place at the Company's office in this city.

By order of the Board.

GEORGE S. YERGER, Pres't.

GEORGE S. LAWRASON, Sect'y.

New Orleans, Dec. 22, 1857.

☞ The Panama Railroad Company has declared a semi-annual dividend of 6 per cent. in cash, payable 16th inst., after setting aside \$50,000 to the Sinking fund for the mortgaged bonds held in London.

## REPORT OF THE RAILROAD COMMISSIONER OF THE STATE OF TENNESSEE.

(Concluded.)

The Louisville and Nashville Company have nearly completed the first Tennessee section of thirty miles. It is calculated by the company to have the iron laid as far as the base of the Cumberland Ridge by the close of the next summer—by which time, or before, they also expect to have the roadbed completed from Bowling Green to within two miles of the same point; at this part of the line the Cumberland Ridge Tunnel will delay the completion of the work for about eighteen months. The northern end of this road from Louisville, is in operation about thirty-five miles, and working forces are engaged in preparing the balance of the roadway. No fears are entertained of the final success of the enterprise.

The Tennessee and Alabama Company have not finished any portion of their road within two years past, though it will be seen that an additional section of twenty-two miles is now in progress. Should the balance of the work be finished in the same manner as the first section, this will be a model road, and will reflect credit upon its managers and superintendents.

The work of the Central Southern is going forward—a large portion of the road (35 miles) from Columbia being under contract. The Alabama part of the line from Decatur, it is understood, on account of the lightness of the work, will be finished earlier than the Tennessee road. The two roads, when finished, will materially diminish the length of travel from Nashville to the Southwest, and will also offer a direct connection with the line of roads contemplated through Alabama to the waters of the Pensacola Bay.

The Edgfield and Kentucky, with the Henderson road, is located through a productive region, abounding in extensive agricultural and mineral resources. The coal fields traversed by this line in Kentucky are of considerable extent—of easy access, and the coal is of superior quality. The opening of this road is of importance to Nashville, and other points, considered merely with reference to the certain and abundant supplies of fuel which it would furnish. In this point of view alone, the work is an important one—but it will also fall into the lines of through roads in Middle Tennessee, and connect the railroad systems of the north-west with those of the south and south-east. The company has thirty miles of road from Nashville under contract, beside having charge of the bridges now being built across the Cumberland river, for the joint use of this and the Louisville and Nashville road. On the Kentucky portion of this line, there are thirty miles of roadway completed from Henderson, and detached portions of work done on other parts of the line. The Tennessee part of this line will be built. I understand it is probable that steps will be taken to put forward the work in Kentucky, and that a consolidation of the two companies is also contemplated.

Through Middle Tennessee will also be established several continuous lines of travel and commerce. The Tennessee and Alabama, and the Louisville and Nashville roads, will aid in forming the direct line of roads from Mobile and New Orleans by the way of Nashville, to Louisville, Ky. The Edgfield and Kentucky, with the Henderson road, will fall in with the Tennessee and Alabama, and the Central Southern, and thus will furnish a direct communication between the south and

south-east, and the extensive and growing regions of the north-west. While the Nashville and Chattanooga road, crossing the different lines, almost at right angles, will, with the Nashville and North-western road, when completed, serve to connect the Missouri system with those of Georgia and South Carolina.

The Chattanooga and Cleveland road, now under the control of the East Tennessee and Georgia Company, will, it is thought, be completed in the course of the next summer. A good working force has been kept on the road since it was commenced, and part of the iron has been purchased for the superstructure. This road, though a short one, is important to the perfection of the Tennessee system, as it will prevent the necessity of the present divergence by the way of Dalton, and what is of more importance, will render the Tennessee, to some extent, independent of the Georgia roads.

The earnings of the East Tennessee and Georgia road have increased during the present year. I refer to the condensed report of its operations for specific details.

The East Tennessee and Virginia road has yet a gap of about thirty-two miles to finish. The grade on this part can be finished with a good working force in two or three months. The heavy draughts now made on the Company for interest on their State debt, is, however, exceedingly embarrassing to the work. The means of the company are nearly exhausted; it has, besides the funded debt, a considerable floating debt, to carry, and the operations of the road in its unfinished condition, will do but little toward furnishing relief. Any delay, therefore, on this work, at this time, will be ruinous to the interests of the company, and of essential injury to other roads in the State.

When this road shall be completed, the line of roads through East Tennessee, (connecting with those of Nashville and Memphis, and in a short time with Mobile and New Orleans,) will be one of the most important in the South. It will shorten the travel to the great northern cities about 350 miles, passing through some of the most interesting portions of Tennessee and Virginia, and with the Alexandria and Orange road, completed to Lynchburg, there will be almost an air line of railway travel from Tusculum, Ala., to the cities of Washington, Baltimore, Philadelphia, New York, and Boston. The completion of the East Tennessee and Virginia road, will at once draw off the through travel from the South that now goes by the Southern route. It can have no successful rival. It invites the Southerner from the more northern routes, by its directness; the character of the country through which it passes, and by the consideration that he will be on a Southern road. The circuit of the Southern line, the monotonous character of the country through which it passes, and the comparative absence of pleasant summer resorts, equally throw it out of the line of successful competition with this middle route.

I regret that I have obtained no report from Knoxville and Charleston Company. I know, however, as a fact, that the thirty miles section from Knoxville is under contract, and the work of construction has been going on. This road is united with the South Carolina line of roads from Anderson Court House to the Tennessee State line; the distance to Knoxville from the former is about one hundred and ninety-six miles. The State of South Carolina has vested a large amount in the



enterprise, and good faith requires that the Tennessee part should be completed. The portion of the road outside of the State will pass through a mountainous region, and its cost will be large. The object of the companies is to open a direct line from Charleston to Knoxville, and by means of the Knoxville and Kentucky line, reach the Ohio river.

I have not included in my estimates any of those roads whose respective companies have not put them in a course of construction. The following roads are in this condition so far as I am advised, viz :

The South-Western,\* Nashville and Cincinnati, Tennessee, Western and Charleston, Junction or Memphis and Charleston Extension; and the Mississippi Central and Tennessee Extension to Huntington, and the Atlantic, Tennessee and Ohio road. The aggregate amount of State aid to these enterprises is about \$4,260,000.

The legislation of the last ten years upon the subject of railroads has been extensive, and is somewhat complicated. So many alterations and amendments have been made at different times, that it is difficult to understand the various provisions of law on the subject. It would be well to impose on the road commissioner the duty of compiling the laws which apply to the works which are now built, or those likely to be constructed hereafter, including in a condensed form also, the charters of these different companies. Such a work, it is thought, would be of service to railroad men, and to the public generally.

By the law, as it now exists, it is made the duty of the Executive to issue the Bonds of the State to the authorized agent of the company making application therefor, upon satisfactory evidence of a compliance on the part of the company with certain specified conditions. The agent receiving these bonds is prohibited from selling them at less than their par value. But as no penalty is prescribed, the law is inoperative. I have felt it my duty to report on some cases of the violation of this provision, and I am satisfied there are other instances of similar violation that have not been so reported.

It is well known that our state securities have been selling at a heavy discount for the two past years, and at such rates, too, as were not justified by the resources of the State, nor its character for promptness, in the discharge of its pecuniary obligations. Several causes have transpired to depreciate the value of the State bonds independent of any peculiar condition of the money market. In the first place these bonds are often handed over to contractors in payment of the companies' indebtedness to them. The holders being anxious to realize the cash, are disposed to press their sale in the first market they can find, without much reference to what may, or may not be obtained at other points. The railroad agent also, who is charged with the duty of negotiating the State bonds, is often unskilled in the business, and in his contact with shrewd operators, suffers ruinous losses, in the way of brokerages, commissions, charges for advancements, etc., which such characters know so well how to put upon the uninitiated holder.

But the most potent cause of this decline in the value of State Bonds, may be found in

the character of former legislation on the subject of State aid. A large number of roads were chartered with the pledge of State loans to the respective companies, and on paper, the present and prospective liability of the State may be run up to at least twenty-five million of dollars. The capitalist is inclined to regard all these chartered rights as realities, and to fear also for more extended liberality on the part of the legislative authorities. He therefore becomes alarmed for the safety of the State debt, and places his discounts accordingly. If the roads not now placed under contract should be lopped off from the system, (which certainly can be done without violence to any interest or section) and the policy rigidly adopted of withholding State aid from any future enterprise, it would do much, it is believed, to restore the depreciated credit of the State.

The present law requiring railroad officers to make biennial reports to the Road Commissioner, at least sixty days before the meeting of Legislature can possibly be made more efficient. In the first place, these officials should make annual reports to the Commissioner, and a uniformity of detail be enforced in the reports. As the law now is, a general statement is pretty much all that is required, giving but little of the statistical detail of the railroad operations, and which is so necessary to a correct understanding of the true condition of the country. I have felt called on, to undertake the task of systematizing the reports of the companies that are to be hereafter made, and to put them in such shape, as would elicit the important information, which the books of the respective companies, could so easily furnish. I have applied to the systematical reports of roads in other States, and have succeeded in preparing the form of a report, which, it is believed, would effect the object indicated. It will require the action of the Legislature to give it authority, and it is therefore respectfully submitted along with this report for your consideration.

R. G. PAYNE, Road Commis'r.

October 19, 1857.

#### LOSSES OF LIFE AND PROPERTY IN 1857.

The New York Herald gives the following interesting tables of the losses during the past two years. They show one fact, for which we have always contended, that there are fewer lives lost by railroads than by other modes of traveling.

The following table exhibits the number of fires attended with loss of human life, which have occurred in the United States during the past two years, together with the number of persons whose lives have been sacrificed to the devouring element :

Months.	1857.		1856.	
	Fires.	Lives Lost.	Fires.	Lives Lost.
January.....	8	18	16	32
February.....	6	9	8	21
March.....	9	11	7	7
April.....	8	22	8	14
May.....	8	32	5	6
June.....	5	5	3	4
July.....	2	7	7	22
August.....	5	11	—	—
September.....	4	5	0	23
October.....	8	32	6	10
November.....	9	16	11	37
December.....	—	—	9	17
Total.....	72	153	89	183

#### STEAMBOAT ACCIDENTS IN 1857.

The following table embraces the number of steamboat accidents which have occurred on the rivers, lakes and bays of this country, which were attended with loss of life and injury to persons during the year 1857, together with the number of killed and wounded. We

also give a comparative table of like accidents in 1856 :

Months.	1857.			1856.		
	Ac'ts.	Killed.	W'd.	Ac'ts.	Killed.	W'd.
January.....	—	—	—	1	—	1
February.....	3	27	1	2	22	38
March.....	4	12	19	3	89	26
April.....	4	24	27	2	8	—
May.....	3	45	—	3	2	15
June.....	—	—	—	3	4	2
July.....	1	4	10	4	62	10
August.....	2	15	6	—	—	—
September.....	1	1	—	1	66	—
October.....	4	55	5	7	29	11
November.....	7	119	18	2	1	7
December.....	1	20	—	1	5	17
Total.....	30	332	86	29	358	127

#### RAILROAD ACCIDENTS DURING THE YEAR 1857.

The following table shows the number of accidents, together with the number of killed and wounded, which have occurred on the various railroads in the United States during the past year, together with a comparative table of the number during 1856. No accident has been recorded which was not attended with loss of life or injury to person; neither does the table embrace the great number of persons who have been killed and maimed by jumping from moving trains, attempting to get on cars while they were in motion, being run over, etc.:

Months.	1857.			1856.		
	Ac'ts.	Killed.	W'd.	Ac'ts.	Killed.	W'd.
January.....	15	12	71	23	24	86
February.....	12	16	61	16	8	67
March.....	13	17	44	11	12	40
April.....	15	16	36	14	11	49
May.....	9	10	33	7	6	10
June.....	5	7	18	5	4	21
July.....	9	10	48	13	78	140
August.....	14	8	62	8	10	14
September.....	15	18	88	10	11	44
October.....	11	8	50	11	7	24
November.....	3	3	9	11	10	37
December.....	5	5	10	14	14	97
Total.....	126	130	530	143	195	629

#### ARIZONA.

The following are a few extracts from the memoir of Lt. Mowry and others to Congress, asking for the territorial organization of Arizona. They will give our readers some idea of the condition of the country and will be read with interest :

The new Territory of Arizona, better known as the Gadsden Purchase, lies between the thirty-first and thirty-third parallels of latitude, and is bounded on the north by the Gila River, which separates it from the Territory of New Mexico; on the east by the Rio Bravo del Norte, (Rio Grande,) which separates it from Texas; on the south by Chihuahua and Sonora, Mexican provinces; and on the west by the Colorado River of the West, which separates it from Upper and Lower California. This great region is six hundred miles long by about fifty miles wide, and embraces an area of about thirty thousand square miles. It was acquired by purchase from Mexico, during the mission of General Gadsden, at a cost of ten millions of dollars.

The proposed boundaries of the Territory of Arizona, are the 34th parallel of latitude, with New Mexico on the north, from the 103d meridian west to the Colorado; Texas on the east; Texas, and the Mexican provinces of New Mexico and Sonora on the south; and California on the west. The new Territory would thus contain within its borders the three largest rivers on the Continent, west of the Mississippi—the Rio Grande, Gila, and Colorado of the West, and embrace 90,000 square miles.

As early as 1687, a Jesuit missionary from the province of Sonora, which, in its southern portion, bore already the impress of Spanish civilization, descended the valley of Santa

\*Since this report was handed in, I learn from the officers of this company, that a section of thirty miles has been placed under contract, on which about ten thousand dollars have been expended. The company had made no report, and the omission is, therefore, attributable to its officers. The omission, however, does not affect my estimate of the probable future liability of the State.



Cruz river to the Gila." Passing down the Gila to its mouth, after exploring the country, he retraced his steps, penetrated the country north of the Gila river for some distance, and ascended the Salinas or Salt river, and other northern branches of the Gila. The explorations of this energetic priest did not stop here. Proceeding east, he explored the valley of the San Pedro and its branches, thence along the Gila to the Mimbres, and probably to the Rio Grande and the Mesilla valley. Filled with the enthusiasm of his sect, he procured authority from the head of the order in Mexico, and established missions and settlements at every available point. In a report to the government of the viceroy of Spain, made during the early settlement of the province, I find the following language: "A scientific exploration of Sonora, with reference to mineralogy, along with the introduction of families, will lead to a discovery of gold and silver so marvellous that the result will be such as has never yet been seen in the world."

The reports of the immense mineral wealth of the new country, made by the Jesuits, induced a rapid settlement. There are laid down on the map more than forty towns and villages. Many of these were of considerable size. There were a few north of the Gila, and several on the lower Gila, near the Colorado. The Santa Cruz and its tributary valleys teemed with an agricultural and mining population. Thousands of enterprising Spaniards cultivated the rich valley of the San Pedro, and scattered settlements flourished at every suitable stream and spring at the foot of the mountains towards the Rio Grande.—The notes before me say: "All these settlements and missions were founded in fertile valleys, and by streams and springs, which produced luxuriant crops of wheat, corn, and beans, and in many parts grapes and other foreign fruits were cultivated."

In the western part of the Territory were the missions of St. Pierre, St. Paul, St. Matthias, St. Simond, St. Francisco, Merce, the ranches of Eau Cheri, Eau de la Lune, and others; on the Santa Cruz the missions of San Xavier del Bac, Santiago, San Cayetano, and San Philippe, the towns of Tucson, Tubac, Reges, San Augusta, and many others. San Xavier del Bac is still in existence. It is a mission church of great size and beauty, magnificently ornamented within; forty thousand dollars in solid silver served to adorn the altar. Upon the San Pedro river were the missions of St. Mark, San Salvadore, San Pantaleon, Santa Cruz, and the towns of Quiduria, Rosario, Eugenia, Victoria, and San Fernando—the latter at the mouth—with many more.—To the east some small settlements were found on the Valle del Sauz, on the Mimbres, at the copper mines north of the Mimbres, and to the south the immense grazing and stock-raising establishment of San Bernardino, where since have been raised hundreds of thousands of cattle and horses. The Indians in the vicinity of the missions were reduced first to obedience by the Jesuits, and then to slavery by the Spaniards.

The notes referred to above contain the names and localities of more than a hundred silver and gold mines which were worked with great success by the Spaniards. The survey of the Jesuit priest about 1687 was repeated in 1710 with renewed discoveries, and consequent accession of population. From this time up to 1757 the conquest and settlement of the country was prosecuted with vigor, both by the Jesuits' Society and Spanish Government.

The missions and settlements were repeatedly destroyed by the Apaches, and the priests and settlers massacred and driven off. As often were they re-established. The Indians at length, thoroughly aroused by the cruelties of the Spaniards, by whom they were deprived of their liberty, forced to labor in the silver mines with inadequate food, and barbarously treated, finally rose, joined with tribes who had never been subdued, and gradually drove out or massacred their oppressors. A superior civilization disappeared before their devastating career, and to-day there is scarcely a trace of it left, except scarcely visible ruins, evidence everywhere, of extensive and hastily deserted mining operations, and the tradition of the country. The mission of San Xavier del Bac, and the old towns of Tucson and Tubac, are the most prominent of these remains. The labors of the Jesuits to civilize the Indians are still evident in the mission Indians, the Papagos and Pimas, who live in villages, cultivate crops of corn and wheat, and who, in the Christian and human elements of good faith and charity, are, to say the least, in no way inferior to the Mexicans.

From 1757 down to 1820, the Spaniards and Mexicans continued to work many valuable mines near Barbacora, and the notes in my possession speak of many silver mines, most of which contained a per centage of gold. "The San Pedro gold mine in 1748 was worked with extraordinary success."—Among the mines anciently worked, as laid down in the authorities heretofore referred to, were the Dolores, San Antonio, Casa Gordo, Cabrera, San Juan Batista, Santa Anna, (which was worked to the depth of one hundred and twenty yards,) Rosario, Cata de Agua, Guadalupe, Conilla, Prieta, Santa Catarina, Guzopa, Hurstano, Arpa, Descuidada, Nacosare, Arguaga, Churinababi, Huacal, Pinal, and a great number of others which it would only be tedious to mention.

The most celebrated modern localities are Arivaca, (also anciently famous as *Aribac*), Sopori, the Arizona mountains, the Santa Rita range, the Cerro Colorado, the entire vicinity of Tubac, the Del Ajo, or Arizona copper mine, the Gadsden copper mine, and the Gila river copper mines. These last are situated directly upon the Gila, only twenty-five miles from its mouth.

Every exploration within the past few years has confirmed the statements of the ancient records. The testimony of living Mexicans, and the tradition of the country, all tend to the same end. Col. A. B. Gray, Col. Emory, Lt. Michler, Lt. Parke, the Hon. John R. Bartlett, late of the United States Boundary Commission, all agree in the statement that the Territory has immense resources in silver and copper. Col. Emory says in his report:

"On account of the Gold Mania in California, I kept the search for gold and other precious metals as much out of view as possible, scarcely allowing it to be a matter of conversation, much less of actual search. Yet, enough was ascertained to convince us that the whole region was teeming with the precious metals. We everywhere saw the remains of mining operations, conducted by the Spaniards, and more recently by the Mexicans."

Under an intelligent system, the Sonora minea would yield a hundred millions a year, and the supply is inexhaustible. If any reader doubts this statement, refer him to the statistics of Humboldt, Ward, and Wilson,

most unquestioned and valuable authorities. Both Humboldt and Ward note the fact that the silver deposits grow richer as they are traced farther north. There can be no doubt that the most extensive and valuable minea, both of pure silver and silver mixed with copper and lead, are within the limits of Arizona.

Of the present mining operations in the Territory of Arizona, the most considerable, in point of labor performed and results, is "The Arizona Copper Mining Co." This company is incorporated by the California Legislature, with a capital of one million of dollars.

The Sonora Exploring and Mining Company was organized in 1836, with a capital of two million dollars (\$2,000,000). Its principal office is in Cincinnati, Ohio, and its seat of operations at Tubac, in the Santa Cruz valley. This company is managed in its mining operations by Chas. D. Poston, Esq., a gentleman of much experience on the Pacific coast, and of great energy of character.

The Rancho of Arivaca, containing several valuable silver mines, and seventeen thousand acres of valuable land, has been purchased by this company. It has also acquired the title to a number of other valuable mines of Galeana ore, and copper containing silver and gold. Hitherto, the exertions of the company have been directed principally to explorations and cleaning out the old mines, but they have at present above ground, ready for smelting, several thousand dollars worth of their ores.—Prof. Booth, U. S. Assayer, as well as other distinguished authorities, have, after thorough experiment, given to the company certificate of the great richness of the ores already shipped to the east. The annual report of the Sonora Mining Co. is full of interest to the general reader.

The population of the new Territory of Arizona is at present not far from eight thousand, and is rapidly increasing. The Mesilla Valley and the Rio Grande are probably the most thickly populated, containing about five thousand people. A majority of the Mesilla inhabitants are Mexicans, but they will be controlled by the American residents, whose number and influence is constantly on the increase. The Santa Cruz Valley, in which are situated the towns of Tucson, Tubac, Tumacacari, and the mining settlements of Sopori and others, is, next to Mesilla, the most thickly settled.

Tubac had been completely deserted by the Mexicans. It has been re-occupied by the Sonora Exploring and Mining Company, and now boasts a population of several hundred.

In five years a great State may be built upon this remote frontier, and a population gathered, such as will, when we make further acquisition of territory, spread at once over it, diffusing national sentiment and extending the area of American principles.

Aside from these considerations, justice and humanity, imperatively demand that Congress shall hear and at once answer the prayer of the people of Arizona for protection. If these considerations fail, then they offer interest; for the organization of the Territory is the guarantee of a supply of silver, which will create as great a revolution in the commercial world as has the gold of California. Arizona will be known as the silver State, and the prediction of Humboldt, that the balance between gold and silver, destroyed by the California discoveries, would one day be restored, will be made good, from the resources of the Gadsden purchase.



## RAILWAYS OF THE UNITED KINGDOM IN 1856.

(Concluded.)

## FINANCIAL POSITION OF RAILWAYS.

The total amount of capital raised for the construction of railways on the 31st December, 1856, amounted to £308,775,894, which represents an expenditure of £33,459

per mile of railway open. In making this estimate, it must be recollected that the lines reported to be in course of construction amount in length to about one-ninth of the whole length completed and under construction, and that some portion of the cost per mile belongs to those lines.

But it is worthy of notice that although the cost of railways in the United Kingdom has averaged £33,459 per mile, viz., £40,288 in England, £27,750 in Scotland, and £14,808 in Ireland, the average cost of the independent lines of railway for which the acts have been obtained since 1848, and which are now opened for traffic, has only

amounted to £9,568 per mile; of these railways, those opened in England have averaged £12,273 per mile; those opened in Scotland have averaged 5,408 per mile; and those opened in Ireland £6,716 per mile.

Of the total amount of money raised, £77,359,419 has been raised by loans, £57,057,171 by preference shares, and the remainder, viz., £174,359,304, by ordinary share capital.

The following table shows the proportion which the receipts upon railways have borne to the capital raised during the last eight years:—

Year.	Capital paid up on the 31st December in each year.		Total raised by shares on the 31st December in each year.	Loans on the 31st December in each year.	Total raised by shares and loans to the 31st December in each year.	Average interest on				Total amount of interest on preference shares and loans.	Gross receipts.	Amount available for dividend, after deducting 45 per cent. on gross re- ceipts for working expenses for each year previous to 1855, 48 per cent. for 1855, and 47 per cent. for 1856, and also deducting the interest on prefer- shares and loans.	Average ratio of dividend on the whole of the ordi- nary share of capital invested on railways.
	Ordinary.	Preference.				Preference shares.		Loans.					
						Rate.	Amount.	Rate.	Amount.				
1849	£158,560,118	£19,852,506	£178,412,624	£51,335,154	£229,747,778	5·63	1,118,270	4·67	£2,401,096	£3,519,366	£11,806,498	£2,974,208	1·88
1850	150,022,877	34,740,800	184,763,677	55,507,068	240,270,745	5·61	1,950,741	4·60	2,558,568	4,509,309	13,204,668	2,753,259	1·83
1851	155,060,024	34,494,155	189,554,179	58,686,717	248,240,896	5·26	1,795,874	4·54	2,663,829	4,459,703	14,997,459	3,788,900	2·44
1852	161,400,256	38,700,755	200,101,011	64,064,668	264,165,679	5·21	2,019,743	4·18	2,743,780	4,763,523	15,710,554	3,887,282	2·40
1853	165,054,677	43,527,379	208,582,056	64,742,458	273,324,514	5·02	2,177,347	4·14	2,696,242	4,873,589	18,035,879	5,046,145	3·05
1854	166,030,806	49,377,952	215,408,758	70,660,036	286,068,794	5·01	2,475,188	4·27	3,021,286	5,496,474	20,215,724	5,622,175	3·39
1855	169,604,017	52,818,026	222,422,043	75,161,241	297,583,284	4·92	2,603,382	4·35	3,285,475	5,888,857	21,507,599	5,295,095	3·12
1856	174,359,304	57,057,171	231,416,475	77,359,419	308,775,894	5·65	3,227,778	4·66	3,607,072	6,834,850	23,165,493	5,442,862	3·12

The following table shows the per centage proportion which the preference and loan capital bears to

the ordinary share capital, and the per centage of profits:—

Year.	Per centage Proportion.				Per centage of gross receipts less working expenses (estimated at 45 per cent. for the years previous to 1855, at 48 per cent. for 1855, and at 47 per cent. for 1856, to total amount of Capital and Loan.	Average Interest on Capital and Preference Loan.	Average rate of dividend on the ordinary Share Capital.	
	Ordinary Capital.	Prefer. Capital and Loan.						Total.
		Preference	Loan.	Total.				
1849	69	9	22	31	100	2·83	4·94	1·88
1850	63	14	23	37	100	3·02	5·00	1·83
1851	63	14	23	37	100	3·32	4·79	2·44
1852	62	14	24	38	100	3·27	4·63	2·40
1853	61	15	24	39	100	3·63	4·50	3·05
1854	58	17	25	42	100	3·88	4·58	3·39
1855	57	18	25	43	100	3·76	4·60	3·12
1856	57	18	25	43	100	3·97	5·08	3·12

It will be seen from this table that the preferential and loan capital invested in railways is 43 per cent. of the whole capital, and that the interest which has to be paid upon the preferential and loan capital averages 5·08 per cent.; the net receipts on railways give an average interest on the whole capital invested of nearly 4 per cent., but the heavy preferential charges reduce the interest on the ordinary capital to 3·12 per cent.

It also appears that the receipts of railway Companies

have increased steadily although slowly every year. The large amount of preferential capital has prevented a proportionate increase in the dividends on the ordinary share capital; but the steady increase in the net receipts in a greater ratio than the increase of the capital invested is evidence of sound progress.

The stability of railway property depends chiefly upon a careful management. Without entering into this question, which is one of great difficulty owing to the magnitude of the

several undertakings, the extent of territory they occupy, and the conflicting interests to which they are subjected, it is desirable to call your Lordships' attention to the fact, that whilst in 1855 a case occurred in which the accounts of a railway company were audited in so lax a manner as to have admitted of a considerable amount of peculation in many branches of the service; in 1856 an important Company suffered great loss in consequence of the defective system of audit having permitted the forgeries of an *employee* to escape unobserved for a length of time.

Frauds thus committed entail serious losses upon Shareholders, and the Shareholders will be continually liable to frauds of this nature until a more careful system of audit, and one independent of those directly concerned in the management of the railways be generally adopted, and until a direct responsibility be placed on those to whom that management is confided.

## ACCIDENTS.

A detailed report upon the railway accidents which occurred in 1856 has already been laid before your Lordships; the returns of traffic for the railway Companies were not, however, then complete, and the proportion of accidents to the number of persons conveyed could not be shown.

The number of persons who suffered from accidents on railways in the years 1855 and 1856, compared with the number of persons who traveled, is exhibited in the following table:—

Description of Persons.	1855.								1856.							
	England.		Scotland.		Ireland.		Total on all railways in 1855.		England.		Scotland.		Ireland.		Total on all railways in 1856.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
Passengers killed or injured from causes beyond their own control	8	249	1	35	1	7	10	311	8	255	..	25	..	2	8	282
Passengers killed or injured owing to their own misconduct or want of caution	15	14	2	2	1	4	18	20	15	11	3	3	1	2	19	16
Total number of passengers killed or injured	23	263	3	57	2	11	28	331	23	266	3	28	1	4	27	298
Servants of Company or of contractors killed or injured from causes beyond their own control	22	28	4	11	2	2	28	41	23	36	1	2	6	8	30	46
Servants of Company or of contractors killed or injured owing to their own misconduct or want of caution	87	45	4	1	6	5	97	51	96	30	11	3	5	1	112	34
Other persons crossing at level crossings	31	5	..	1	4	..	35	6	23	2	1	..	4	..	28	2
Trespassers	47	14	3	..	3	..	53	14	51	5	13	2	3	..	67	7
Suicide	2	..	..	..	1	..	3	..	3	..	1	..	..	..	4	..
Miscellaneous	2	1	..	..	..	..	2	1	13	5	..	2	..	..	13	7
Total	214	356	14	70	18	18	246	444	232	344	30	37	19	13	281	394
Total number of passengers conveyed	99,175,923		12,206,926		7,212,286		118,595,135		108,368,901		13,097,233		7,881,453		129,347,592	

The following table shows the proportion of passengers killed and injured from causes beyond their own control,

per million, conveyed in the several years, from 1852 to 1856 inclusive:—

	England.		Scotland.		Ireland.		Great Britain and Ireland.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1852	·14	4·3	·0	5·8	·0	3·2	·11	4·20
1853	·23	2·6	·09	4·5	2·4	1·6	·35	2·80
1854	·09	3·08	·16	3·51	·14	·57	·10	2·97
1855	·08	2·51	·08	4·59	·14	·97	·10	2·70
1856	·07	2·35	..	1·92	..	·25	·07	2·18

It thus appears, that only one person in 16,168,449 who traveled has been killed, and one in 458,370 who traveled has been injured from causes beyond their own control; and that the degree of safety with which passengers have been conveyed is greater than in any year since 1851.

I have the honor to be, my Lords,

Your most obedient Servant,

DOUGLAS GALTON,

Captain Royal Engineers.



## MONETARY AND COMMERCIAL.

The past week—the first one of the new year—has been in some respects a very stringent one, but yet would encourage the hope that the worst is over for the merchants. January and July settling days are always difficult times to raise money. But the settlements of the present season show that there is not any thing near the amount of indebtedness to be paid that is usual at such times. The result will be that notwithstanding the present stringency of the markets, mercantile houses will be able to recover earlier from settlement day.

The payments of the first were generally met with great promptness, and indicate a healthy state of things in our business circles.

Exchange on the East, which has stood for some time at  $\frac{1}{2}$ , is declining. Some bills have been drawn at 1—and the demand is not active.

Stocks are dull. Few sales are made, and prices realized will hardly justify quotations. They are the results of necessity and chance, and vary from day to day, according to the pressing demands of the season.

The panic in Europe would seem to have passed the climax. There is a decided improvement in the English money market. The Bank of France has reduced its rate of interest to six per cent. A favorable reaction has begun in Hamburg. But the panic is spreading to the North. It will undoubtedly reach every commercial city before it is entirely over. The reason to be drawn from this march of devastation which will cover the globe, is one of economy and thrift. It tells of the dangers of overtrading and the system of credits, and warns against the continuance of such ruinous measures. But it is one which will soon be forgotten, and which needs to be repeated at least once in twenty years.

In New York things begin to present a more cheerful appearance. The specie in bank was nearly \$30,000,000. The rates of discount were less, and paper was more easily negotiated. The banks are declaring dividends. This circumstance will readily account for the resumption of specie payment at the time it took place.

We annex our usual quotations for the sales at the stock board.

## SALES AT THE NEW YORK STOCK BOARD—Jan. 2.

\$8,000 Tenn. State 6's, '90.....	80
10,000 Miss. 6's.....	77½
1,000 Michigan 8's.....	81½
3,500 Illinois Central R. R. Bonds.....	85
3,900 Erie '62.....	41
313 shares New York Central.....	74½
100 " Harlem R. R. stock.....	6
200 " Erie R. R.....	16½
300 " Cleveland & Toledo.....	42½
39 " Cleve. & Cin. R. R.....	97
12 " Mich. Cent.....	52½
600 " Mich. S. & N. Ind.....	19¾
200 " Illinois Central.....	89¾
100 " Cleve. & Pitts.....	11
59 " Chicago & Rock Island.....	72½

The following table shows the losses by fire in the United States during each month, compared with those of 1856:

Months.	1856.		1857.	
	No. Fires.	Loss.	No. Fires.	Loss.
January.....	18	\$1,007,000	21	\$1,012,000
February.....	22	1,480,000	19	1,798,000
March.....	21	1,435,000	24	1,765,000
April.....	15	1,817,000	30	1,900,000
May.....	17	1,481,000	18	698,000
June.....	19	1,160,000	14	1,094,000
July.....	23	4,096,000	15	1,387,000
August.....	13	1,345,000	19	1,310,000
September.....	26	1,712,000	19	1,245,000
October.....	16	1,160,000	16	1,511,000
November.....	20	3,041,000	24	1,597,000
December.....	17	1,135,000	9	435,000

Add to the above the amount of property destroyed by fire where in each instance the loss was less than twenty thousand dollars, and the aggregate would be increased to probably twenty-seven millions in 1856, and to twenty millions in 1857.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY. Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. J. R. 27. RICHARD NORRIS & SON.

IRON BOILER FLUES  
PASCAL IRON WORKS.

MORRIS, TASKER &amp; CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite length as required.WROUGHT IRON WELDED TUBES,  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,

PHILADELPHIA.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '66-2m.] J. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## Reliable Books for Travelers.

DINSMORE'S

R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains Official Time Tables with References; Combined Railroad Routes; Steam Navigation; Gazetteer. Price 25 cents, with Large Map

DINSMORE'S THIRTY MILES AROUND N. YORK, By Railroad, Steamboat, Stage, Express and Telegraph; or how to get in and out of the Metropolis. An alphabetical list of 1000 places. Price 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Funk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents. DINSMORE & CO.,  
9 Spruce street, New York

## INDIANAPOLIS,

Terre Haute, Lafayette, Chicago,

AND THE NORTH-WEST.

INDIANAPOLIS AND CINCINNATI  
SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Duane, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

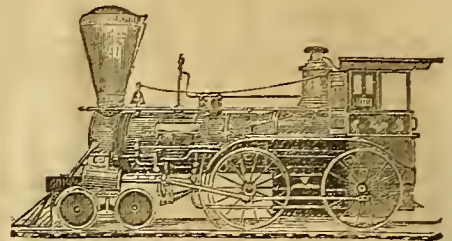
VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; N. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

CINCINNATI  
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.  
ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers, Engine and Car Screw Bolts, all sizes; Couch Lag and Telegraph Screws.

LOCOMOTIVE ENGINE LANTERNS

From the best Manufacturers, and at their prices. Ca Hand, and Signal Lanterns.

Cotton Duck for Covering,

Of any required width to 124 inches.

ENAMELLED HEAD LININGS

Plush and Curled Hair.

Hand Cars and Baggage Barrows, Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for windows and Seats. Varnish, Coach Japan and Glue, Paints, Varnish and Glue Brushes. Silver Plated and White Metal Letters, Engine and Signal Bells, anti-friction or Babbitt Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.  
foc6.

## GEO. D. WINCHELL &amp; BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION &amp; FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines, and all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

13 A. L. (The highest prize) awarded at the Ohio Mechanics' Institute. June 18, 1855 F1



## RAILROAD RECORD

693

TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r St.	When Payable.	Where Payable.	When Due.	Description of Bond.	Qu't of Bonds	Name of Company.	Qu't of Stock	Ln'n of Road	Capital	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	173	Alb'ndria, Lon. & Hamp sr	54.55	6,000,000.00			209,475.46	110,246.98	none.
408,800	7			1862-3	2d		Androskog'n & Kennebec		1,400,000.00					4 pr. ct. 6m
199,000	6	July & Jan.			Domestic.	86.5	Atlanta and LaGrange...		1,000,000.00	199,000.00	278,123.74	173,780.74	8 pr. ct.	
52,646	6			now	"	12.5	B'ng'r, Old T. & Milford.		135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53	
500,000	7		N. Y.	1860	"	44 6-8	Boston & Worcester.		4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.6m	
500,000	7			1866	1st mortgage.		Buffalo & State Line.		1,300,000.00				5 pr. ct. 6m.	
300,000	7			1857-9-62	Income.		"							
200,000	7			1864	Domestic.		"							
577,187	6			1872	4th mortgage.		Central Ohio.							
192,200	7			1874	1st mortgage.	43	Champl'n & St. Law'rnce		1,872,800.00	1,001,087.00	168,200.00	77,700.00	10 per ct.	
380,000	7				2d		"							
1,140,000	7				Domestic.	110	Ch'r'l'te & South Carolina.		1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300	
1,300,000	6-7-8		N. Y.		1st mortgage.	138	Ch'go, Burl'ng'n & Quincy.		3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m	
374,000	8				2d		"							
					Convertible.		"							
1,300,000					1st mortgage.		Chicago, Fulton & Iowa.							
532,000					2d	131	Cin. Will'ng'n & Zanes'ville		1,761,149.16	2,241,500.00	221,491.96			
104,000					3d		"							
305,500					Income.		"							
540,000	6				Convertible.	139	Cleveland Col. & Cin.		4,741,220.00		1 3 754	700,804	6 per cent.	
43,000	7			1873	1st mortgage.	85	Cleveland & Mahoning.		1,500,000.00					
400,000				1864	2d		"							
							Cumberland Valley.	52	1,218,300.00		160,511.56	81,101.56	\$33,250.24	
1,000,000	7			1873	1st	52	Dayton & Cin. short line.		1,000,000.00	1,000,000.00				
500,000	8			1857-8-9	1st mortgage.	93 6-10	Eastern Railroad.		3,345,900.00		665,578.79	288,087.84	\$234,133	
350,000						130	East Ten. & Virginia.		625,350.00		30,897.50	19,692.30		
740,000	7			1869	1st mortgage.	20	Essex Railroad.		700,000.00					
88,000	10			1861	2d	109	Evansville & Crawf'd'vle		2,225,657.50		243,970.42	136,061.90	\$133,281.45	
400,000	7			1864	1st mortgage.		The Fitchburg (Mass.) R.R.		3,540,000.00		681,162.52	213,837.81	3 per cent.	
200,000	10					33	Fox River Valley.		800,000.00					
						15	Fair Haven Branch.		300,000.00		50,381.33	14,822.45	\$166,240.00	
100,000	6				1st mortgage.	233	Georgia RR & Banking Co		4,156,000.00		1,068,836.00	357,659.42	\$166,240.00	
100,000	6				1st	20	G't Falls & Conway R.R.				27,376.69	14,207.07		
300,000	7			1858	1st	281 1/2	G't West'n R.R. of Can.		4,191,550.00		2,068,836.00	176,529.94	8 pr. ct.	
4,000,000	6 1-9			1869-70	1st	74	Housatonic Railroad.		2,000,000.00		339,196.56	176,529.94		
2,000,000	7			1860	2d	144	Hudson River.		4,000,000.00		1,924,382.44	718,037.40		
1,812,000	7			1875	3d mortgage.	144	"		4,000,000.00					
12,885,000	7 1/2			1876	1st	704	Illinois Central R. R.		18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.	
4,115,000	7 1/2			1860	Freeland.	704	"		3,558,376.00					
3,000,000	7			1860	1st mortgage.	72 1/4	Indiana Central.				351,871.00			3 pr. ct.
600,000	7				2d		"							
700,000	7			1862	1st mortgage.	13	Iron R. R.		123,700.00					
50,000	7						Kentucky Con. 2d Div.		719,500.00					
700,000							Knoxville & Kentucky.							
218,000	7			1866	1st	32	Laurens (S. C.) R. R.		166,000.00		23,233.59	14,233.59	\$8,000	
1,000,000	7			1875	2d	184	Louisville & Nashville.				50,234.71	14,149.13	10 pr. ct	
1,000,000	7					12 3/4	Lowell & Lawrence		300,000.00		587,236.57	162,277.50		
2,000,000	6			1868	1st		Mad River & Lake Erie.		2,697,090.00					
2,500,000	7			1868	1st		"		2,697,090.00					
2,000,000	7			1874	2d	26	Manchester & Lawrence.		1,000,000.00				\$24,000	
60,000	7 and 8			1867	1st		Marietta & Cincinnati.							
420,000	8					27	Mexican Gulf R. R.							
320,000	8			1881	1st mortgage.	30	Milwaukee & Horicon.							
320,000	8			1868	2d	32	Mineral Point R. R.							
6,000,000	6			1884	1st	32	"							
				1869	1s mortgage.	497	Mobile & Ohio.		10,000,000.00		253,498.96	162,802.24	7 pr. ct.	
500,000	7					15	Nashua & Lowell R. R.		600,000.00		193,752.42	55,501.74	2 pr. ct. 6m	
8,356,000	6	May & Nov.	N. York	1864	Con. till 1859.	55	New Haven & North'm'tn		922,500.00					
32,892,600	7	June & Dec.	N. York	1873	1st mortgage.	555	New York Central.		23,067,400	14,763,897	7,707,248	3,609,481	3 pr. ct. 6m	
1,000,000	7			1864	2d	123	N. Y. & Harlem R. R.		6,717,100.00		1,040,393.26	64,678.71	\$37,692.30	
936,000	7			1863	1st		" Pref.							
411,700	6					50	N. Y., Prov. & Boston.		1,58,000.00		245,713.00	51,544.40		
500,000	7					66	N. Lon., Willim'tu & Pal.		1,700,000.00		120,571.50			
300,000	8				2d		"						\$25,000	
						5	Pontchartrain R. R.		500,000.00					
1,500,000	6			1873	1st mortgage.		N. O., Opelous & Gr. West.		6,000,000.00		116,795.00	366,118.80	7 pr. ct.	
1,000,000	6			1873	2d	62 1/2	N. Y. & New Haven.		3,000,000.00		1,007,666.48			
2,000,000	6			1865	3d	103 1/2	North Western Va. R. R.							
1,500,000	7			1859	1st mortgage.		"							7 pr. ct.
3,000,000	5					118	Northern (N. Y.) R. R.		2,000,000.00		600,000.00			
419,300	7			1877		99 2	North Missouri R. R.				25,176.74	88,458.56	2 1/2 pr. ct.	
221,800	6			1860		60	Norwich & Worcester R.R.		2,111,500.00		304,236.33			
							"							
						94	Ogd'nsh'g, Clay'tn & Rome				289,690.10	137,875.93	5 pr. ct.	
400,000	6			1866	1st mortgage.	83 3	Ontario, Simcoe & Huron		2,957,500.00		276,539.02			
1,200,000	7			1875	2d mortgage.		Orange & Alexandria R.R.							
300,000	8			1868	1st mortgage.	47	"		1,500,000.00					
300,000				1873	1st		Peoria & Bureau Val. R. R.						6 pr. ct.	
						28 1/5	Philadelphia & Trenton.		1,000,000.00					
350,000	8			1861	1st mortgage.	47	Portsmouth & Concord.							
800,000	7			1864 to 1874	1st	76	Potsdam & Watertown.		2,000,000.00					
1,260,000	6			20 years.	1st mortgage.	62 1/2	Rutland & Washington.		950,000.00		68,525.42			
						36	St. Louis & Iron Moun. R.R.		600,000.00					
						168 3/4	Salem & St. Louis R. R.		4,000,000.00					
						116	Snd'sky, Mansf'dd & New'k						19,050.64	
500,000	6				1st mortgage.	26	Sullivan Railroad.		500,000.00		75,246.06		17,378.08	
250,000	6				2d		"							
						145	Tennessee & Alabama.				39,586.44		11m. 12 pr. ct	
1317,000					1st mortgage.	73	Terre Haute & Richmond		1,294,450.00					
300,000				1861	1st mortgage.	212	Toledo, Wabash & Western		1,000,000.00					
198,000				1840	2d		Troy & Boston.							
262,200				1875	2d		"							
						46	Vicksburg & Jackson.						165,076.04	
2,500,000					1st, 2d, 3d	215	Virginia & Tennessee.		3,000,000.00		322,048.60		2 pr. ct.	
						31	Westchester (Pa.) R. R.		165,000.00					
596,000	7				1st mortgage.	171	Wilmington & Manchester							
200,000	7				2d		"							
						32	Winchester & Potomac.							
						45 69.	Worcester & Nashua.							



# GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

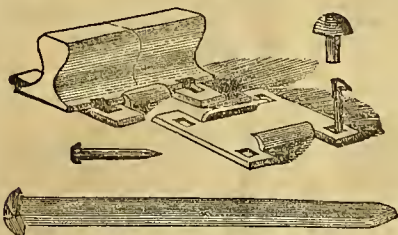
## RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

### GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of **Wrought Chairs, Hook and Flat Head Railroad Spikes** of all patterns, **Boiler Rivets, Bolts** of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.  
feb. 28 CORBY, GOSSIN & CO.

**Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.**

VIA LAWRENCEBURG,

IN connection with the **Ohio and Mississippi Railroad**. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:30 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [jan-1y] Agent.

**APPLEGATE & CO.,**

Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, O.

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
**JAMES H. MORLEY, New York City.**  
**OR SUMNER SMALL, Boston, Mass.**  
ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,**

**RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.  
feb5-ly

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

**CHARLES ELLET, Jr., Civil Engineer.**  
No. 228 H Street, Washington, D. C. apr12

### W. G. HYNDMAN'S



### Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas filters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
**W. G. HYNDMAN,**  
ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,**

**Mechanical Engineer,**

AND

**AMERICAN AND FOREIGN PATENT AGENT,**  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions.  
oc23

### RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

**THEODORE DEHON,**  
feb5-1f 10 Wall st., near Broadway, New York.

### ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jy23-1m

### D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,  
Respectfully Yours,  
**D. M. CARHART,**

oct29-6m

Box 1831, Cleveland, Ohio.

### T. F. RANDOLPH & BRO. Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,

CINCINNATI, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.

## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, and all kinds of Machinery, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE &amp; LEAVITT.

1857.

November 30.

1857.

1857.

Summer Arrangement.

185

## LITTLE MIAMI AND COLUMBUS AND XENIA

## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office southeast corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnbuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnbuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BARCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

Jan2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE &amp; CO.,

Jan8 1y 119 Walnut st., Odd Fellows' Buildin

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]

## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

**THROUGH TICKETS FOR**  
PITTSBURG, INDIANAPOLIS, TERRE HAUTE, ST. LOUIS, LAFAYETTE, LOGANSPORT, CHICAGO, BOSTON,  
PHILADELPHIA, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS, NEW YORK,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPORT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and sapper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 9:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia, arriving at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS TRAIN** on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.**

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:30 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

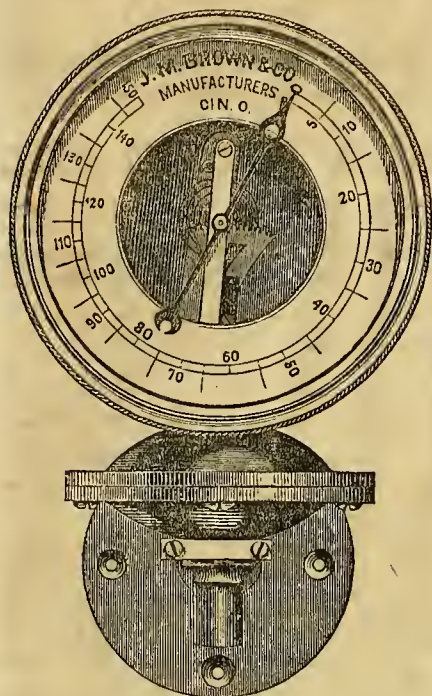
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges, FOR LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES, DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Fall Lever Wrenches and Wrought on Blacksmith's Ties.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD.**—For Ledgers and Records only. **MERCANTILE.**—For Books, Letters, and General purposes. **COPYING.**—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.

JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us nine dozen quart bottles like that you left us for trial.

Yours, truly J. REED, Clerk.

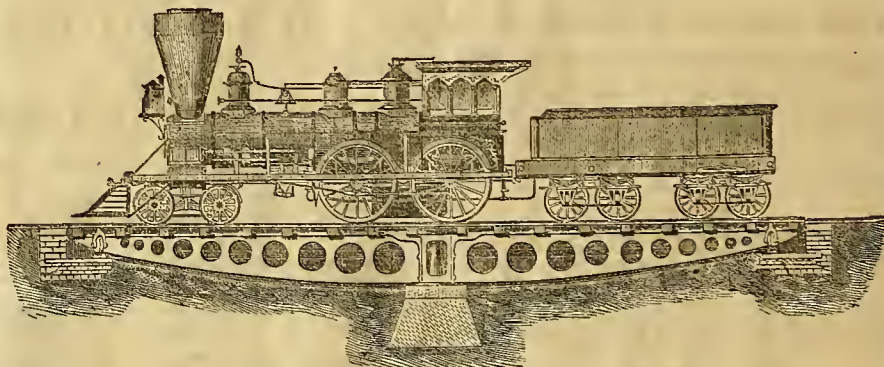
The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers & Co. —LATE—

### BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING AND SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills, Belt Cutting machines, &c.

WILLIAM SELLERS,

JOHN SELLERS, J



# Railroad Record.

E. D. MANSFIELD, }  
W. WRIGHTSON, } Editors.

CINCINNATI:

THURSDAY MORNING,.....JANUARY 14, 1858.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 47.

#### EDITORIAL.

Early History of Railroads—Engineering.....	697
Marietta & Cincinnati R. R.....	697
Lumber Trade of Albany N. Y.....	698
Pensacola & Georgia R. R.....	698
Locomotive Explosion.....	698

#### RAILROADS.

Terre Haute & Richmond R. R.....	699
New York Central R. R.....	700
Important Railroad Movement.....	603

#### MISCELLANEOUS.

Message of the Gov. of Ohio.....	701
Message of the Gov. of Pennsylvania.....	702
On the Disturbances of Suspension Bridges, and the Modes of Counteracting them.—By Messrs. A. S. Luken, and Charles E. Conder.....	702

#### MONEY AND STOCKS.

Monetary.....	703
Cincinnati Stock Sales.....	703

**MARIETTA AND CINCINNATI R. R.**—This company is in serious difficulty on account of its floating debt—a thing which is always difficult for a railroad to carry, and much more so for one whose credit does not stand very high. We hear of individual instances of severe hardships, occasioned by the non-payment of claims; which, in justice, should have been arranged. The road is understood to have a large surplus of rolling stock and machinery not needed for its present business, and it is currently rumored that it has had a cash offer for a sufficient amount of this surplus to pay up all its claims. If such is the case, the officers of the company should not hesitate to accept the offer and reduce its liabilities. Whatever may be the state of the case, the company should make an exhibit of its actual condition, its debts, and its resources. And such, we hope, will be forthcoming.

**MADISON, FOND DU LAC AND MICHIGAN R. R.**—This company has purchased the Watertown division of the Milwaukee & LaCrosse Railroad.

VOL. 5.—No. 47.

### EARLY HISTORY OF RAILROADS.—ENGINEERING.

In our first articles on this subject, we aimed only at presenting the *primitive ideas*—as we may call them—in relation to grades, inclined planes, stationary engines, cost, etc. We showed that the science of Civil Engineering was, at that period,—thirty years since—in its infancy. Such practical facts, as Latrobe's 115 feet grades, traversed by ordinary engines on the Baltimore & Ohio R. R.; of curves sweeping rapidly round the base of hills, instead of inclined planes; of the capacity of iron bars and locomotives to bear over the country immense burdens of coal, and heavy products, against the competition of canals, was not then thought of. The power of locomotives, or the friction of iron, were not then understood. The necessity for heavy iron for ballasting—for permanent structures—thus immensely increasing the cost, was not understood. In fine, as we remarked, the railroad was then a different machine, whose utmost cost was not more than *half* what the least expensive railroads now cost. Indeed, we may well doubt whether half as many miles of road as now exist, would ever have been made in the United States, had the early projectors formed any adequate conception of the cost and difficulties of their construction. Indeed, there are some important roads which have been entirely *made over again*. The grades have been entirely changed; the iron taken up, and the speed doubled. If this revolution had not taken place, not a single person would go on some of them! It is marvelous, in fact, that half the passengers were not killed in the early period of American Railroads. This brings us to the Engineer and Machinist—for to these two really belong all the glory of having made the Railroad the perfect, powerful, and admirable machine it now is. GEORGE STEPHENSON, in England, deserves a laurel crown—not merely from his own country, but from the civilization of the earth. The triumphs of his engineering skill are greater than the passage of the Bridge of Lodi, and more enduring than the victory of Austerlitz.

But, our own country has raised not one, but several engineers, who have conferred lustre on the practical science of our country. We need not mention WHISTLER, with whose career we happened to have been intimate, and who was transferred to Russia, at the desire of the Emperor, and there died. Nor McNEILL, among the earliest of those engaged in railroads. Nor Judge WRIGHT, of New York; but, shall trace, for a moment, the history of engineering on the *Baltimore & Ohio R. R.* in its early stages.

We mentioned, in our first notice of this road, its conception and origin at a small meeting of intelligent citizens of Baltimore,

in the year 1827. It may be noted here, that the original subscription of stock to the Baltimore & Ohio Railroad, was *three millions*, a sum more liberal, we believe, in proportion to their means, than has been made to any other public enterprise. The corporation of Baltimore subscribed half a million, and the State of Maryland half a million, making the original subscription *four millions*. This amount was surely large enough to *commence* a work, even of the magnitude of the Baltimore Road. At that time, however, it was difficult to procure engineers of any sort in this country, and sending to Europe ought to be, and was avoided. The company made an application to the War Department for U. S. Engineers, and the result was the employment of Dr. HOWARD, who had been in the service of the department of Captain W. GIBBS McNEILL, and Lt. Col. S. H. LONG, of the corps of Topographical Engineers. They were allowed also to take their assistants, and in July, 1827, the officers ready for duty were Dr. Howard, Col. Long, Cap. McNeill, Mr. Harrison, and Lts. Berney, Trimble, and Dillahenty.

Of this corps, Capt. McNeill is dead, and we believe one or two others. Col. Long is now engaged, by direction of the Government, in the Improvement of the Ohio and Mississippi Rivers. He is now one of the most distinguished among the scientific men of the country, and is well known to the public. In the commencement of his career, he was one of the teachers at West Point, and subsequently became one of the earliest explorers of the country between the Mississippi and the Rocky Mountains.

His observations and descriptions were published under the title of “Long's Expedition”—a well known work. At the time we speak of, Col. Long was, as now, in the corps of Topographical Engineers, and with Captain McNeill, also of the corps, was ordered into the service of the then new company, for the construction of the Baltimore & Ohio R. R. In the month of November, 1827, the preliminary examination and survey of three different routes to the Monocacy were surveyed, and the route unanimously agreed upon by the engineers engaged.

On the 1st of January, 1828, there was constituted what was called a “Board of Engineers,”—an invention which, we believe, has never been adopted since. The President of the Board of Directors, Mr. THOMAS, and we suppose the Board, concluded that they wanted *two* chief engineers! But, in order to prevent their vetoing one another, and coming into collision, a *third* was added, who was the President of the company, and these three were called the Board of Engineers, communicating with the Board of Directors through the President, who was a member of both Boards. A contrivance more



complicated, and more certain of producing difficulties, we do not know. Such an arrangement would certainly be a marvel in the eyes of the practical men who now conduct the engineering on our great roads. Controversies, as may be supposed, did arise, which ultimately dismembered the Board, and changed the whole management of the road. These we may pass by, and refer to the elementary principles laid down by Col. Long, and Mr. Knight in their professional conference. They agreed:

1st. That the average cost of constructing a double railroad and keeping it in repair forever, was estimated at \$25,000; or in other words, that this sum, put at six per cent. interest, from the date of the work, would finish and keep it in repair.

2dly. That the cost of transportation forever—including repairs, motive power, labor, etc.,—would be the income of \$50,000.

3d. That the power required to overcome an elevation of thirty feet, independent of horizontal distance, was equal to that required for the conveyance of the same load over a distance of one mile.

We need not refer here to other propositions, laid down by the Board, but look, for a moment, at them. There can be no question that low, as it was, this estimate of the first cost of the road was much nearer than those made for the *New York & Erie*, for the *New York Central*, and numerous other roads made since. Yet, we see, that \$25,000 per mile did not cover half of the first cost of the Baltimore and Ohio R. R., and were it completed, with a double track, it would not cover one third. But, for this variation, the engineers were accountable for a small part. No condition of the problem, as then presented to the engineers, were really fulfilled. The Baltimore Road was not finished in twenty-five years! But, let us suppose that the cash was actually supplied, and the road finished in five years, and see how a fair view of the original estimate will look:

1. Cash in hand.....	\$25,000
Partial interest.....	3,000
2. Add cost of T rail (extra) on one mile.....	3,000
3. Sunk since in discounts and interest.....	5,000
Per mile.....	\$36,000

This is the real estimate of the engineers, as compared with what was actually done. But, as the road has actually cost \$50,000 per mile, and has little double track, it is quite obvious that the estimates were much too low. On the other hand, as we said at first, a railroad is a *different machine* from what it was, and, consequently, engineers must not be made responsible for variations which were beyond their power to foresee.

The first stone of the *Baltimore & Ohio* was laid by CHARLES CARROLL, of Carrollton, and the first Report of the Board of Engineers was made by COL. LONG.

We shall, from time to time, note the pro-

gress of Civil Engineering, as a science, and of Machinery, as an art; both intimately connected with the whole progress and growth of Railroads.

#### LUMBER TRADE OF ALBANY, N. Y.

The position of this city at the terminus of the Erie and Champlain Canals, and the transshipping point of the produce of the great lake basins, makes it necessarily a very important point for the lumber trade. Accordingly we find the great and almost inexhaustible forest of Northern New York, of Michigan, and of Canada sending their manufactured lumber there by cheap lake and canal navigation, and by railroad. From this point it is distributed by sloops and schooners on the whole length of the Hudson river and the Atlantic seaboard, and by railroad throughout the New England States.

The receipts during the past and few preceding years were as follows:

	B'ds & Sc'lings feet.	Shingles M.	Timber C. ft.	Staves, lbs.
1851.....	252,326,300	28,346	110,200	110,381,200
1852.....	305,111,900	31,158	279,500	105,707,300
1853.....	378,731,300	27,071	19,906	113,153,300
1854.....	299,593,100	23,327	28,909	129,924,300
1855.....	226,520,700	51,673	12,413	136,101,400
1856.....	215,565,900	62,328	14,584	108,833,400
1857.....	211,401,900	50,453	79,989	151,623,900

The tide water receipts—which include the deliveries at Albany, West Troy, New York, and Waterford—for the years 1856 and '57, are as follows:

	1856.	1857.
Boards and Scantlings, ft.....	388,580,400	380,167,900
Shingles, M.....	67,100	69,474
Timber, C ft.....	3,791,700	2,380,841
Staves, lbs.....	165,466,000	258,099,400

From this it would appear that there had been a decrease in the consumption of boards, scantling and timber, and an increase in the consumption of shingles and staves. This fact would lead to the conclusion that buildings erected in the region dependent on this market had been more of brick and other substantial materials, than in former years, though still covered with shingles. The increase in the sales of staves is probably owing to the extension of the market to Europe.

SAVANNAH, ALBANY & GULF R. R.—The first seventy-two miles of this road are expected to be completed and in running order during the present month.

PENSACOLA AND GEORGIA R. R.—The Annual Meeting of the Stockholders of this road took place at Monticello, December 2. Mr. Cabell was unanimously re-elected President of the Board of Directors, and all the old members of the Board were also re-elected, except two. Col. E. E. Blackburn, of Jefferson, and Maj. Joseph Charles, of Leon, were elected in lieu of Gen. Whitefield, and Maj. G. T. Ward.

COVINGTON AND LEXINGTON R. R.—The December earnings of the Covington & Lex-

ington Road as compared with the receipts for the same time last year, are:

December, 1857.....	\$35,644 76
December, 1856.....	35,160 64
Increase.....	\$11,554 12

#### LOCOMOTIVE EXPLOSION.

One of the most remarkable locomotive explosions on record occurred recently on the Sandusky, Mansfield & Newark Railroad. The boiler parted in several places simultaneously, the pieces flying with tremendous force right and left, scarcely any of them lodging within forty yards of the track. One fragment, weighing not less than two hundred pounds, was found in a field to the left eighty rods distant; while others of nearly equal weight passed half that distance through the woods to the right, stripping huge branches from trees in their progress. A piece of the engine bell was also picked up in the field, one hundred and twenty rods from the place of explosion. The flues of the boiler were twisted into an almost solid mass; the heavy cylinders twitched off, hattered, and blown a number of rods, carrying with them the pistons and part of the connecting rods; the truck and driving wheels, with very heavy spokes of solid wrought iron, were bent wholly out of shape;—in short, the engine was blown to fragments, an utter wreck beyond the possibility of repair. The fence on either side was laid by the escaping steam completely open, presenting an appearance similar to that of having been swept away by a sudden rush of water.

The following gentlemen have been elected as Directors of the Cleveland and Pittsburgh Road:

Messrs. Farmer, Clark, Rice, and Fitch, of Cleveland; Turnbull of Steubenville, McCullough of Wellsville, Holloway, of Bridgeport, List of Wheeling, Lyon of Pittsburgh, Stow of Beaver, and Kingsley of New Haven.

The following are the officers of the Company:

James Farmer, President and Superintendent; E. Rockwell, Secretary; W. W. Chandler, General Freight Agent; J. F. Clark, T. Fitch, Harvey Rice and J. W. McCullough, Executive Committee.

The earnings of the Covington and Lexington Railroad for December, 1857, were \$46,000, being an increase of 11,000 over the corresponding month of 1856. The depression of the times since September last has lessened Railroad business throughout the country, but this line seems to be less affected than any other from which we have seen the returns.

We understand that the interest on the First Mortgage bonds of the La Crosse and Milwaukee Railroad has been paid, and \$15,000 of the same bonds have been retired by the Sinking Fund for \$12,000 cash deposited with the U. S. Trust Company.



## Railroads.

### TERRE HAUTE AND RICHMOND RAILROAD.

We are in receipt of the Ninth Annual Report of the officers of this well managed Company. As it is short, we give it almost entire. From the financial statement of the secretary, it will be seen that this road presents a striking contrast with the majority of our roads. Its capital stock is more than five times its bonded debt. In this respect this Company, untrammelled with the load that is weighing down so many of our large corporations, and paying its regular dividends to its stockholders, presents an agreeable contrast with the debt-bound companies which are rarely able to make even a small surplus above necessary interests and discounts. The report of the Company says:

In presenting our Annual Report, the President and Directors feel pleasure in being able to make so favorable an exhibit of the operations for the year, ending November 30, as is shown in the statement of the Secretary, hereunto annexed.

It will be seen, from these statements, that the gross earnings were \$41,271 59, which is less than the gross earnings of the previous year; this difference is attributable to several causes:

*First.* The receipts of 1856, were, as is stated in our Report of that year, unusually large, in consequence of the interruption of river navigation, while the Summer and Fall of 1857, have been remarkable for the continued navigation of the rivers of the west.

*Secondly.* While the crops of 1856 were comparatively light, the high prices for produce, then ruling, caused the surplus to find an early market; while the financial embarrassments of the country, which occurred in the latter part of the present year, the season when usually our heaviest transportation business is done, has delayed the movement to the seaboard, of the large surplus products of the present year.

This monetary pressure has, also, to a large extent, curtailed the purchase of merchandise by the west. The section of the country, depending on this Road, as an outlet, has a large amount of produce, which must sooner or later be transported to market. As the pressure begins to lighten, we feel confident that, in a short time, we shall have a heavy business.

The business at the Coal Mines has been increased during the year, and large quantities of coal, lime, rock, lumber, and shingles, have been taken over the road.

While the operating expenses of the Road have not been unusually large, the aggregate expenditures have been increased, by the making of permanent improvements, the cost of which has been charged to the income of the Road;

as by order of the Board, the Construction Account was closed last year. Owing to the difficulty of procuring suitable building material, at the time the Road was under construction, it was necessary to build some of the bridge abutments and piers, of timber. During the present year, these abutments and piers have been removed from six of the covered bridges, and cut limestone, rock masonry substituted; and a large part of the whole line has been supplied with limestone arch culverts and drains. The remaining two covered bridges will be rebuilt, with masonry, as early in the coming season as practicable.

The trestle bridge at "White Lick" has been replaced with a new covered Howe's superstructure. Pine lumber, was, also, procured, sufficient for five to six hundred feet of bridge superstructure, which has been framed and carefully housed, in readiness for use when required. Ninety thousand new cross-ties, and one hundred and fifty tons of new rails, have been laid on the Road-bed.

The side tracks have been relaid and lengthened, and new sideings laid, equal, in extent, to four miles of track.

At several of the water stations, the wooden water pipes have been taken up and cast iron pipes substituted.

The freight house at Indianapolis, has been extended one hundred and sixty feet in length, making the whole building four hundred feet long, with a double track in the center; also, a track has been laid down on the outside of the building, to suit the Ohio gauge, so that cars are started at Pittsburgh or Cleveland, and landed at our platforms.

This freight house has a two story front building, furnishing the offices requisite and ample room for the business done at that station. The building is of brick, and is finished in a neat architectural style.

At Coatstown and Greencastle, ground has been purchased for the convenience of shipping stock. And at "Eagle Creek," where the best ballasting is found, land has been purchased, which, it is believed, will furnish a sufficient supply for the future wants of the Road.

The rolling stock, purchased and built, during the current year, is as follows—viz:

2 Passenger Cars—purchased.  
2 Baggage and Express Cars—built at the Company's shop.  
4 Stock Cars—built at the Company's shop.

24 Platform and Coal Cars, (16 of which are to replace old cars)—built at the Company's shop.

10 gravel cars, (to replace the same number worn out)—built at Company's shop.

The rolling stock belonging to the Road, consists of

18 Locomotives.  
17 First Class Passenger Cars.

8 Baggage and Express Cars.

94 House Cars.

40 Stock do.

174 Coal and other Cars.

The stock of fuel purchased, during the year, has been large, and a full year's supply is now on hand.

The trains have been run with regularity, and no accident has occurred, causing loss of life or limb, to passengers or employees.

To the officers, in charge of the several departments, and the employees, of the Company, the Board is indebted for a faithful discharge of their duties, and a zealous devotion to the interests of the stockholders.

Since our last Annual Report, the honored President of our Board, Samuel Crawford, was removed from among us by death. And within a few weeks past, Mr. John Crawford, also a member of this Board, was suddenly taken from our midst. Both these gentlemen, by their devoted friendship to its interests, as well as by official relations, were identified with this Corporation, from its organization.

The business of the Company for the past year, has been as follows:

The gross earnings, for the year, are.....	\$481,271 59
Operating Expenditures.....	\$210,084 34
Additional Expenditures.....	65,108 58
	<u>275,192 92</u>

Net Earnings.....	\$206,078 67
Taxes.....	\$ 6,255 85
Interest and Exchange.....	16,949 77
June Dividend.....	81,687 00
December Dividend.....	81,687 00
	<u>186,579 62</u>

Surplus Earnings.....	\$ 19,499 05
-----------------------	--------------

At the close of the last fiscal year, there were outstanding, of the Mortgage Bonds.....	\$317,000 00
Surrendered and converted into Stock, during the year.....	67,000 00

Bonded Debt, November 30, 1857.....	\$250,000 00
The Capital Stock, November 30th, 1856, was.....	\$1,294,450 00
Increased, during the year, by Bonds surrendered.....	67,000 00

Capital Stock, November 30, 1857.....	\$1,361,450 00
---------------------------------------	----------------

Aggregate of Stock and Bonds.....	\$1,611,450 00
-----------------------------------	----------------

In the account of the Stockholders, (Statement No. 3,) is shown a balance of.....	\$142,312 91
---	--------------

Which is represented by the following accounts:

Evansville & Crawfordsville R. R. Stock...	\$34,429 89
Madison & Indianapolis Railroad Income Bonds.....	1,600 00
Real Estate, for Wood.....	2,601 10
Atlantic & Mississippi Railroad.....	625 00
Fuel, on hand.....	21,000 00
Material, on hand.....	34,014 45
Oil and Waste, on hand.....	966 33
Terre Haute, Alton & St. Louis R. R., balance due for Freight and Charges.....	61,748 82
Treasurer.....	78,316 96

\$225,202 55

From which deduct balance of Dividends unpaid.....	\$ 1,077 64
Dividend, declared Dec. 21, 1857, payable in January.....	81,687 00
Bills Payable, (this is a balance due on Lot, purchased at Greencastle, payable when the deed is perfected.....	125 00
	<u>\$ 82,889 64</u>

\$142,312 91

### BALANCE OF LEDGER.

Construction.....	\$1,585,809 22
Union Depot and Track at Indianapolis.....	25,640 78
	<u>\$1,611,450 00</u>



Evansville & Crawfordsville R. R. Stock..	24,499 89
Atlantic & Mississippi Railroad.....	525 00
Madison & Indianapolis Railroad Income	
Bonds.....	1,600 00
Real Estate for Wood.....	2,601 10
Material.....	34,014 45
Oil, Waste and Tallow.....	966 33
Fuel.....	21,000 00
Terre Haute, Alton & St. Louis R. R. Co..	61,748 82
Treasurer.....	78,316 66

Capital Stock.....	\$1,361,450 00
Bonds, seven per cent.....	250,000 00
Bills Payable.....	125 00
Dividends unpaid.....	1,077 64
Divided Declared.....	81,687 00
Surplus Account.....	142,312 91

\$1,836,652 55 \$1,836,652 55

There is one point in the report, however, which we regret to see, and in which, we think, this Company may improve very materially—out of *eighteen* locomotives used on this road, we do not see the name of a single one manufactured at the west. We believe it to be generally conceded that western engines are as effective and durable as those of eastern make. The principal point of difference between eastern and western engine builders is, that the former give longer credits than the latter. This should be no object to any company—much less to a Company which shows a cash surplus nearly twice as large as its usual dividend. The manufactories of the west support in part—and that no small part—the population which must give business to the road. It is, therefore, the interest of western railroads to support western manufacturers. We hope, in the next report of the Company, to find a different statement.

The officers for the year 1857, were E. J. Peck, *President and Superintendent*; Chas. Wood, *Secretary*; John Scott, *Treasurer*; Chauncy Rose, James Farrington, Demas Deming, W. H. Thornburgh, E. J. Peck, A. McGregor, H. Ross, Chas. Wood, John Crawford, *Directors*.

#### NEW YORK CENTRAL RAILROAD.

The following is the statement of the officers of this road, as per return made to the State Engineer for the year ending September 30, 1857:

The aggregate length of the road is 555.88 miles; length of double track, 311.80; of branches, 258.18; weight of rail, 56 to 75 lbs.; number of locomotive engine houses and shops, 38; of locomotives, 218; of eight wheel first-class passenger cars, 196; second class, ditto, 74; of baggage, mail and express cars, 64; of freight cars, 2,707; gravel and other service cars, 285.

The average rate of fare, for first class passengers, (way and through,) two cents; second class, one cent; average for all classes, 1.92; average rate per mile on all classes of freight, 3.986.

#### COST OF ROAD AND EQUIPMENTS.

For Graduation and Masonry.....	Present time.
For Bridges.....	\$6,777,106 60
For Superstructure, including iron.....	808,067 91
For Passenger and Freight Stations, Buildings and Fixtures.....	10,156,195 02
	1,169,071 40

For Engine and Car Houses, Machine Shops, Machinery and Fixtures.....	733,596 64
For Land, Land Damages and Fences.....	3,932,929 05
For Locomotives and Fixtures, and Snow Plows.....	2,351,466 19
For Passenger and Baggage Cars.....	851,127 81
For Freight and other Cars.....	1,969,483 34
For Engineering and Agencies.....	603,528 92
Construction account of the Rochester and Lake Ontario Railroad Company.....	150,000 00
Construction account of the Buffalo and Niagara Falls Railroad Company.....	658,921 56
Construction account of the Lewistown Railroad Company.....	354,260 69

Total.....	30,514,815 06
Total cost of road and equipment, per last report.....	\$29,786,372 50

#### DOINGS OF THE YEAR IN TRANSPORTATION AND TOTAL MILES RUN.

Miles run by passenger trains.....	1,836,212
Miles run by freight trains.....	1,811,109
Miles run by the wood, gravel and construction trains.....	336,969
Aggregate miles run by the passenger cars in passenger trains.....	6,382,458
The same by baggage, mail and express cars in passenger trains.....	2,415,588
The same by freight cars in passenger trains.....	3,769,402
Aggregate miles run by all cars in passenger trains.....	13,566,448

Number of passengers (all classes) carried in cars.....	2,609,947
Number of miles traveled by passengers (all classes).....	160,423,541
Number of tons (2000 lbs.) of freight carried in cars.....	838,791
Total movement of freight, or number of tons carried one mile.....	145,873,776

The rates of speed by the different trains are as follows:—  
Ordinary Passenger trains in motion, 28 miles; Express Passenger trains in motion, 35 miles; Freight trains in motion, 15 miles per hour.  
Average weight in tons (2000 lbs.) of passenger trains, exclusive of passengers and baggage..... 110  
Average weight in tons of freight trains, exclusive of freight..... 180

The amount of freight in tons:—	Tons.
Of the products of the forest.....	31,468
Of animals.....	180,852
Of vegetable food.....	275,941
Other agricultural products.....	18,989
Manufactures.....	75,731
Merchandise.....	177,708
Other articles.....	78,102

#### Cost of Maintaining Roadway and Real Estate for the Year ending September 30th, 1857.

Repairs of Roadbed and Railway, excepting cost of iron.....	\$706,424 41
Cost of iron (including the cost of chairs and spikes), used in repairs.....	343,043 34
Repairs of buildings.....	112,652 20
Repairs of fences and gates.....	17,147 38
Taxes on real estate.....	134,372 62
Repairs of Mohawk turnpike.....	2,002 93

Total.....\$1,315,542 88

Of this aggregate there is allotted to Passenger transportation, \$629,168 27, and to Freight, \$686,374 61.

#### Cost of Repairs of Machinery for the Year ending September 30th, 1857.

Repairs of engines and tenders.....	\$435,383 43
Repairs of passenger and baggage cars.....	189,385 36
Repairs of tools and machinery in shops.....	30,807 33
Incidental expenses, including oil, fuel, clerks, watchmen, &c., about shops.....	64,096 33

Total.....\$698,988 40

Allotted to Passenger service, \$467,709 94; Freight service, \$431,273 46.

#### Cost of Operating the Road for the Year ending September 30th, 1857.

Office expenses, stationery, &c.....	\$28,973 27
Agents and clerks.....	223,164 39
Labor, loading and unloading freight.....	201,581 87
Porters, watchmen and switch tenders.....	190,245 09
Wood and water station attendance.....	47,778 37
Conductors, baggagemen, and brakemen.....	157,045 60
Enginemen and firemen.....	170,558 31
Fuel, cost and labor of preparing for use.....	847,853 14
Oil and waste.....	123,688 85
Loss and damage of goods and baggage.....	42,749 56
Damages for injuries to persons.....	34,020 96
Damages to property, including damages by fire and cattle killed on road.....	11,330 41
General Superintendence.....	53,794 99
Contingencies.....	106,204 45

Total.....\$2,338,989 25

Allotted to Passenger service, \$1,027,348 44; to Freight, \$1,211,640 82.

The total value of materials on hand September 30, 1857, amounts to \$1,000,647 35, an increase of \$117,995 45 in this item over the previous annual report. The total cost of fuel delivered to the Company and paid for the fiscal year, including the cost of preparing the same for use, amounted to \$847,853 14.

#### INCOME ACCOUNT.

For the Year ending September 30th, 1857.

To Expenses of Maintaining and Operating Road.....	\$4,453,515 55
To Coupons and Interest.....	970,781 12
To Div'd No. 7, Feb. 1857, 4 per ct. 959,782 00	
To Div'd No. 8, Aug. 1857, 4 per ct. 959,782 00	
	1,919,564 00

To Future Income—Amount of one year's contribution to Sinking Funds, transferred to current Income Account:—	
Debt Certificates.....	111,182 38
Bonds to Buff. and N. Falls R. Co. 2,112 00	
	113,294 38

To D. Richmond, Trustee—South Shore Line Lake Erie Steam Boats: Balance of this account transferred to Income Account,.....	44,469 98
Balance September 30th, 1857.....	1,826,572 39

\$9,328,287 41

The proportion of a semi-annual dividend of four per cent., accrued from the 1st of August to this date, is.....\$319,914 00

By Balance, September 10, 1856.....	\$1,301,036 00
By Passenger Receipts.....	\$3,147,636 86
By Freight Receipts.....	4,569,275 86
By Mail.....	89,490 00
By Miscellaneous.....	230,848 67
	8,027,251 41

\$9,328,287 41  
By Balance, September 30th, 1857.....\$1,826,572 39

The General Balance Sheet of the Company gives the following figures:—

Railroad and Equipment.....	\$30,515,815 06
Cash in Banks.....	\$278,907 19
Passenger and Freight Agents:—	
Balance since remitted.....	471,575 29
	750,482 48

Michigan Central Railroad Company;	
Lake Erie Steamboats.....	193,925 27
Buffalo and State Line Railroad	
Company Stock.....	537,800 00
Lewiston Railroad Co. Stock.....	142,110 69
Troy Union Railroad Co. Stock.....	6,881 25
Hudson River Bridge Co. Stock.....	10,080 00
	910,797 21

\$234,554 07

Bills Receivable.....	\$632,000 00
Debt Certificate Sinking Fund.....	\$632,000 00
Future Income; Proportion of debt certificates, &c., chargeable to the Income of the Co. from Sept. 30, 1857, to May 1, 1883.....	8,359,976 77
General Post Office Department.....	\$22,372 50
Trustees Buffalo and Rochester Railroad Company.....	3,156 21
	25,528 71

Real Estate; purchased of Buffalo and Niagara Falls Company.....	32,500 00
	\$41,461,654 30

Capital Stock.....	\$24,136,660 69
Funded debt of Albany and Schenectady R. Co. 134,000 00	
Funded debt of Schenectady and Troy R. Co. 100,000 00	
Funded debt of Rochester and Syracuse R. Co. 287,768 10	
Funded debt of Buffalo and Rochester R. Co.....	58,985 01
Funded debt of Rochester, Lockport and Niagara Falls R. Co.....	300,000 00
Funded debt of Buffalo and Niagara F. R. Co. 55,000 00	
Debt Certificates.....	8,892,600 00
Bonds for Convertible Loan.....	3,000,000 00
Bonds for Railroad Stocks.....	807,000 00
Bonds for Real Estate.....	204,000 00
Bonds for Funded Debts of old Companies.....	399,000 00
Bonds to Buffalo and Niagara Falls R. Co.....	93,500 00
Bond to Telegraph Co.....	10,000 00
Bonds and Mortgages.....	265,657 06
Bills payable.....	197,033 48
Trustees of the Syracuse and Utica R. Co.....	1,606 92
Unclaimed Dividends.....	4,593 10

Expenses of operating road; Balance of September disbursements paid in October.....	305,071 47
Interest and coupons; accrued to September 30, including coupons retained from Buffalo and Rochester R. Co.....	261,687 49
Income account; Balance on Sept. 30th, 1857.....	1,827,572 39
	\$41,461,654 30

The casualties for the year aggregate as follows:—

Passengers killed.....	3
Passengers injured.....	5
Employees killed.....	12
Employees injured.....	10
Others killed.....	22
Others injured.....	3

Of the 37 killed, 18 were lying, standing or walking on



the track; and 17 of the 18 were neither "passengers" nor "employees."

#### NAMES AND RESIDENCES OF THE DIRECTORS AND OFFICERS OF THE COMPANY.

**DIRECTORS**—Erastus Corning, Albany; Dean Richmond, Buffalo; Joseph Field, Rochester; John H. Chedell, Auburn; Horace White, Syracuse; Alonzo C. Paige, Schenectady; Russell Sage, Troy; John L. Schoolcraft, Albany; John V. L. Pruyn, Albany; Nathaniel Thayer, Boston; Edward G. Faile, New York; Isaac Townsend, New York; Livingston Spraker, Palatine Bridge.

**OFFICERS**—Erastus Corning, President, Albany; Dean Richmond, Vice-President, Buffalo; John V. L. Pruyn, General Counsel and President pro tem., Albany; Gilbert L. Wilson, Treasurer and Secretary, Albany.

**OFFICERS IN CHARGE OF THE LINE**—Chauncey Vibbard, General Superintendent, Albany; George E. Gray, Chief Engineer, Albany; D. Hamilton, General Wood Agent, Albany; S. Drullard, General Freight Agent, Albany.

**ASSISTANT SUPERINTENDENTS**—Julius A. Spencer, General Superintendent's Office, Albany; E. Foster, Jr., Albany and Schenectady Division, Albany; Thomas Wallace, Troy and Schenectady Division, Troy; Z. C. Priest, Schenectady and Syracuse Division, Utica; B. W. Chittenden, Syracuse and Rochester Division, Syracuse; Joh Collamer, Rochester, Buffalo and Niagara Falls Division, Rochester.

#### MESSAGE OF THE GOVERNOR OF OHIO.

The following interesting statistics of this State is from the Annual Message of Gov. Chase to the Legislature, and will be read with interest.

Of the 25,577,960 acres which constitute the area of the State, according to Federal computation, no portion worth consideration, can be classed as absolutely uncultivable. Only 10,300,000 acres, however, are actually cultivated, and of these, only about 5,000,000 acres by the plow, while more than 15,000,000 yet remain to be brought under contribution to our power and wealth.

This whole area, with a trifling exception, is reduced to individual ownership, and is divided among about 270,000 proprietors, excluding the owners of town lots. The average quantity of land held by each proprietor, is estimated at about ninety acres.

This division of the land into small properties, promotes improvement in the methods of culture, augments production, insures individual independence, and contributes largely to the security of public freedom. Every tendency in the opposite direction should be watchfully observed, and wisely checked.

The value of these properties, as assessed for taxation, is \$435,602,656, and that of town lots and chattles is \$413,626,426—making an aggregate of \$849,329,081. The real value largely exceeds \$1,000,000,000.

The present population of the State, upon the best attainable data, is estimated at 2,400,000 persons, of whom nearly all, except the very young and the very old, are actively engaged in pursuits which increase or preserve public and private wealth.

The efficiency of this vast human energy is enhanced almost beyond computation by the machinery so extensively introduced into every department of industry. The agricultural machines, put in operation during the last few years, do the work of more than 100,000 agricultural laborers, and do it quicker, better, and cheaper than they could. It is difficult to make any estimate even proximately accurate, in respect to machinery otherwise employed. It is reasonably computed, however, that the steam engines alone, now in use in Ohio, perform labor equal in quantity to more than half a million men, and better in quality, as well as cheaper in cost.

The forces of nature thus engaged to the service of man, through the instrumentality of machinery, augment the means of existence, comfort and enjoyment in Ohio, at least four-fold. The results are seen on every hand, in the increased rewards of labor, and in the improved and constantly improving condition of the people.

Some general statements, under a few heads, will clearly exhibit the more important elements of this industrial progress.

#### I. AGRICULTURAL PRODUCTS.

In 1857, according to the best information, the value of vegetable products, was..... \$67,952,500  
The value of animal products..... \$3,915,000

Total value of agricultural products..... \$151,867,500  
In 1849, according to the census of 1850, the value of vegetable products, was..... \$45,554,549  
That of animals and animal products..... 43,458,098

Making the total value of agricultural products..... \$89,012,647  
And showing an increase of annual agricultural production in eight years..... \$62,854,858  
The value of live stock in 1857, was..... \$73,687,480  
" " " " " 1850, was..... 44,121,741

Increase in seven years..... \$29,565,749

No single fact connected with the agricultural result of the past year, is probably of greater importance, than the establishment by actual experiment, of the practicability of the profitable culture in Ohio, of the Sorghum, or Chinese and African Sugar-canes. The cost of these experiments to the public spirited agriculturists by whom they were made, in land, labor, and machinery, is estimated at not less than \$100,000. Their results secure to our agriculture a new plant, the cultivation of which promises most liberal returns for labor and capital in the form of forage, syrup, and, probably, sugar. The culture of the grape has also been largely extended; bringing into most profitable use hill-sides too steep for other cultivation.

#### II. MANUFACTURES, MECHANIC ARTS AND MINES.

The value of the products of Manufactures and Mechanic Arts in 1857, is estimated at..... \$100,000,000  
The value of the products of Mines, at..... 10,000,000

Total value of products in 1857..... \$110,000,000  
The value of the like products in 1849, according to the Federal census, was..... \$ 62,647,259  
Showing an increase of annual production, in eight years..... \$47,352,741

#### III. COMMERCE AND NAVIGATION.

Vessels built in 1856..... 97  
Tonnage of them..... 29,633 tons.  
Registered and enrolled tonnage in 1856..... 106,541 "  
Registered and enrolled tonnage in 1849..... 57,100 "

Increase in seven years..... 49,441 "  
Vessels entered Ohio ports from Canada in 1856..... 612  
Tonnage of them..... 79,595 "  
Vessels entered same ports from Canada in 1849..... 248  
Tonnage of them..... 24,482 "

Increase in number..... 364  
Increase in tonnage..... 55,118 "

#### IV. RAILROADS.

Miles of Railroad in operation in 1857..... 2,844  
Miles in 1854, according to compendium of census..... 2,367

Increase in three years..... 470  
Number of miles constructed in 1857..... 50  
Number of miles in progress, about..... 200

Total cost of Railroads in Ohio..... \$90,000,000  
Estimated gross receipts..... 10,000,000  
Estimated net receipts..... 4,500,000

According to the compendium of the census, Ohio had in 1854, more miles of railroad in operation than any other State in the Union. The same statement is probably true at this time. If so, the railroads of Ohio form about one-eighth of all the railroads in

the United States, and more than one-fifteenth of all in the world.

#### V. EXPORT AND CONSUMPTION.

The value of vegetable products exported in 1857, is estimated at..... \$23,800,000  
The value of animal products..... 24,500,000  
The value of mineral products..... 2,100,000  
The value of products of manufactures..... 20,000,000

Total exports..... \$ 70,400,000  
The total products as above shown, are..... 261,867,500

Leaving for home consumption ..... \$191,467,500

These condensed statements exhibit clearly the immense actual resources of the State, and inspire a just confidence in her future progress.

It will be seen that manufactures and mines contribute in increasing proportions to the aggregate of annual productions. The coal fields of Ohio are nearly equal to the entire coal fields of Great Britain, and fully equal to those of all Southern Europe. This fact, in connection with the immense beds of iron ore, so widely diffused in the State, demonstrates the capacity of Ohio for mineral production, and for manufactures. Still, Ohio is emphatically an agricultural State. The products of her farms during the last year, very largely exceeded in value the entire cotton crop of the United States. An interest so important can not be too earnestly commended to the legislative regard.

In our State, there are fifty-four banks; thirty-six branches of the State Bank and eight Independent Banks, organized under the act of 1848, and ten Free Banks, organized under the act of 1851.

The laws under which these institutions were organized, were framed with especial reference to the security of the bill-holder. All the branches of the State Bank are made sureties for the circulation of each; and the convertibility to the notes of the other is required to be guaranteed by pledges of the State or United States bonds.

These salutary provisions have protected the people against serious losses from depreciation of the notes of the banks organized under them; and it is highly creditable to their management, that they have passed through the recent crisis, made doubly perilous to many of them by the embezzlement of their cash balances and collection bills at New York, without a suspension of specie payments.

Still, it can not be denied that the danger of a general suspension has been imminent, or that some of these institutions have actually been in a condition of legal, while others have been in a condition of virtual suspension. These facts must necessarily direct your attention to the legislation necessary to protect the people against the hazard of so great an evil.

How far the provisions of the charters of the banks organized under the act of 1844, will admit of additional guards against suspension is matter of doubt. The decision of the majority of the Federal Supreme Court, that the charter of a bank by Legislative enactment is a contract, and, therefore, can not be modified by subsequent legislation, makes the reformation of evils in credit currency always difficult and often impossible.

At the present moment, however, it seems not improbable that an act might be framed acceptable to these institutions and beneficial to the community, by which a much larger specie basis would be provided for circulation and deposits than is now required, and other additional securities obtained against suspension.



The act of 1851, under which the other banks are organized, is amendable at the discretion of the Legislature. Their circulation is secured by the deposit of equal amount in State or Federal Bonds. It is plain that in a financial crisis, when bonds of all descriptions are depreciated, this security becomes inadequate. I recommend the provisions of adequate guards against such a contingency by an increase of the proportion of bonds to circulation, and by a prohibition of the deposit of any other bonds than those of the State or of the United States.

The experience of the last few years has demonstrated, however, that the greatest financial disasters in Ohio have not been occasioned by legally authorized banks of issue. Most of the calamities which have recently fallen upon the business community of this State, have originated in the failure of private bankers and of the Trust Company, issuing no notes for circulation. Many of these bankers, and perhaps the Trust Company also, however, were borrowers, from banks outside of the State, of foreign notes, at low rates of interest to be circulated in Ohio, and redeemed, when returned to the issuing banks, by the borrowers. The effect of these arrangements was to introduce into the State a mass of foreign bank paper which expelled from circulation not only nearly all the coin, but also nearly all the notes of our own banks, and exposed the community to great inconvenience and loss. I suggest the expediency of so modifying the act of February 24, 1848, relating to the circulation of unauthorized bank paper, as to prevent effectually this mischief. Additional protection to the business community, as well as substantial benefits to the sound and strong banks themselves, would result from the establishment of a Clearing House in Cincinnati, for the banks of Ohio, Kentucky and Indiana, either through the voluntary action of the Institutions concerned, or by the concurrent legislation of the States.

#### MESSAGE OF THE GOVERNOR OF PENNSYLVANIA.

The following are some of the most important items of information contained in the Message of the Governor of this State to the Legislature.

The funded and unfunded debt of the State, including temporary loans, on the first day of December, 1856, as per Reports of Auditor General and State Treasurer, was as follows, viz:

FUNDED DEBT.	
6 per cent. loans.....	\$ 511,781 00
5 " " ".....	38,866,994 50
4 1/2 " " ".....	388,200 00
4 " " ".....	100,000 00
Total funded debt.....	\$39,669,975 50
UNFUNDED DEBT.	
Relief notes in circulation.....	\$220,556 00
Interest certificates out'ding.....	24,691 37
" " unclaimed.....	4,448 38
Domestic creditors.....	1,164 00
Balance temporary loan, April 19, 1853.....	400,000 00
Balance temporary loan, May 9, 1854.....	184,000 00
Total unfunded debt.....	824,859 75
	\$40,701,834 25

The funded and unfunded debt, at the close of the last fiscal year, December 1, 1857, was as follows, viz:

FUNDED DEBT.	
6 per cent. loan.....	\$ 445,080 00
5 " " ".....	38,773,212 52
4 1/2 " " ".....	388,200 00
4 " " ".....	100,000 00
Total funded debt.....	\$39,706,592 52
UNFUNDED DEBT.	
Relief notes in circulation.....	\$146,421 00
Interest certificates out'ding.....	23,473 82
" " unclaimed.....	4,448 38
Domestic creditors.....	802 50
Total unfunded debt.....	175,145 70
Total debt Dec. 1, 1857.....	\$39,881,738 22
Total debt Dec. 1, 1856.....	\$40,701,834 25
" " " 1, 1857.....	39,881,738 22
Decrease during late fiscal year.....	\$ 820,097 55

These statements exhibit the gratifying fact that during the past fiscal year, the public debt has been reduced eight hundred and twenty thousand, ninety-seven dollars and fifty-five cents. During the same period large appropriations and payments were made on account of our public improvements, for old and unsettled claims adjusted under the act of last session, and for other extraordinary purposes.

The total receipts at the Treasury from the public works, for the year ending, November 30, 1857, including receipts from the Main Line up to the first day of August last, were one million, three hundred and eight thousand, five hundred and ninety-eight dollars and sixty-two cents, (\$1,308,598 62.) The aggregate expenditures for the same period were one million, three hundred and twelve thousand, seven hundred and five dollars and sixty-seven cents, (\$1,312,705 67;) the expenditures exceeding the revenues four thousand, one hundred and seven dollars and five cents, (\$4,107 05.)

The receipts at the Treasury from the several Divisions were as follows, viz:

Main Line, to August 1, 1857.....	\$796,550 33
Susquehanna and North and West Branch Divisions.....	287,718 95
Delaware Division.....	224,329 34

The receipts from the Delaware Division are less than those of the previous year. The completion of Rival Railroads and other causes, have lessened the receipts from this important division of our public works; and it is feared will continue to decrease them. Its management has been satisfactory, and compared with other divisions of the public improvements, economical. The net revenue, at the Treasury, was \$174,000 87, a decrease of \$90,003 53, as compared with the receipts of the preceding year. In addition to the ordinary expenditures, the sum of \$46,263 was paid for the enlargement and improvement of this division.

The North Branch Extension of the Pennsylvania canal, although so far completed in the fall of 1856, that boats freighted with coal and other products, were successfully passed through its entire length from Pittston to the Junction canal, yet in consequence of a large portion of the "Horse Race Dam" having been carried away by the freshet of last spring, business on the canal was suspended the greater part of the past year. It was repaired during the summer, and in the fall business was resumed along its entire length: Soon after, the same dam was again extensively injured by a sudden and heavy freshet, and the greater part of the canal rendered useless for business. An appropriation will be required to re-construct the dam.

This canal, although useful and valuable, appears to be doomed to failure and disaster. These are the fruits of former mismanage-

ment and fraud in its construction. Every effort has been made to repair the errors of its early management, and to complete and render useful this division of our public works. Under proper management it can be successfully accomplished. In pursuance of the act of the 16th day of May, 1857, providing for the sale of the Main Line of the public works, after giving the notice required by law; I caused the said Main Line to be exposed to public sale at the Merchant's Exchange, in the city of Philadelphia, on the 25th day of June last, and sold the same to the Pennsylvania Railroad Company for the sum of seven millions five hundred thousand dollars, the highest price bid for the same, and the minimum price fixed in the act.

After a full compliance by the purchasers with the conditions of the act authorizing the sale, and the delivery of their bonds in number, and for the amounts equal to and falling due at the time provided for the payment of the respective instalments, the Secretary of the Commonwealth, on the 31st day of July, A. D., 1857, as directed by the act, transferred, under the great seal of the State, to the Pennsylvania Railroad Company, their successors or assigns, the whole Main Line of the public works between Philadelphia and Pittsburgh, together with all the right, title and interest, claim and demand, of the Commonwealth of Pennsylvania to all property, real, personal and mixed, belonging to or used in connection with the same by the Commonwealth; and the purchasers having given notice of their readiness to take possession of the said works, possession of the same was accordingly delivered to the Company on the first day of August last: of which notice was given to all Superintendents and Agents of the Commonwealth, by proclamation bearing date the 31st day of July, 1857, as required by the law authorizing the sale.

The bonds of the Pennsylvania Railroad Company, in the sum of seven and one-half millions of dollars, were received by the State Treasurer, and are held by him for the Commissioners of the Sinking Fund; the entire proceeds of the sale being required by the 12th section of the act to be paid to the Sinking Fund, and applied to the payment of the State debt.

#### ON THE DISTURBANCES OF SUSPENSION BRIDGES, AND THE MODES OF COUNTERACTING THEM.

BY MESSRS. A. S. LUKEN AND CHARLES E. CONDER.

This paper brought under consideration the various kinds of suspension bridges, and examined their greater or less liability to undulations of the roadway, and other disturbances, occasioned by a traversing load, or other causes.

These disturbances were attributed chiefly to the flexibility of the chains, and were enumerated as follows:

1. Undulations caused by traversing loads.
2. Reaction of the roadway on the chains when set in agitation.
3. Transverse swing.
4. Distortions caused by the gravitating tendency of the chains.
5. The effect of unequal loading in bridges of multiple spans.

The first class of disturbances might be reduced by increasing the mass of the chains. The objection to this was that not only would such an expedient prove wasteful of material, but the greater the weight of the chains, the greater the danger of their destroying the



platform, if once set in agitation. Again, the roadway might be supported by a rigid girder, strong enough to withstand any distortion of the chains. Such a girder would, however, be nearly strong enough to carry the load independently of the chains, which would become dangerous auxiliaries to an inflexible platform.

The Niagara Suspension Bridge was adverted to, as having its liability to undulate much reduced, not only by connecting the upper and lower platforms with lattice trussing, but also by employing strong upper and under bracing rods.

It was contended, that while a certain degree of stiffness in the platform would be advantageous, as equalizing the distribution of the load on the chains, the main point for inquiry must be the arrangement of chains and rods best calculated to abate the liability to disturbance.

With this view six modes of arrangements were described and illustrated, viz :

1. The ordinary suspension bridge.
2. The mode of suspension by a double set of crossed chains (Russell's.)
3. The single rod direct suspension.
4. The chain with slanting rods (Dredge's.)
5. The double rod direct suspension.
6. A new mode, distinguished as the convergent suspension, of which two varieties were exhibited and explained, by means of diagrams and models.

1. It was pointed out, that while the ordinary form of suspension bridges effected a marked economy of material, its great flexibility and liability to undulate and swing, operated against its employment for railway traffic.

2. The mode of suspension by crossed chains (as in Mr. Russell's bridge,) while tending in some degree to reduce these disadvantages, required an enormous increase of material, together with a double height of tower.

3. It was stated that the single rod direct suspension, while perfect in theory, as regarded freedom of undulation, was defective, owing to the length required for the rods, the sharp angles at which they met the roadway, and their consequent liability to stretch and "sag."

4. The introduction of a chain to support the slanting rods (as in Mr. Dredge's bridge) diminished these evils and shortened the rods, at the same time that it secured a more equable distribution of the tensions. But this arrangement, in common with the preceding mode of direct suspension, imposed powerful horizontal strains on the roadway; and the excessive strength thus demanded in the platform, militated against economy, if it did not even impair the safety of the whole structure.

5. The double rod direct suspension entirely relieved the platform from any horizontal strain. But the great length and angle of its extreme rods entailed and increased all the other evils to which the single rod direct method was exposed.

6. The convergent mode of suspension was devised to avoid, as far as practicable, the several defects which had been pointed out in the five arrangements above mentioned. From a double set of chains (each extending from the top of one tower to the platform level at the opposite extremity), a double set of rods were suspended, slanting in opposite directions, so that a pair of rods converged to every point by which the platform was sus-

pended. There was thus an entire absence of horizontal strain on the roadway, which might, therefore, be made of extreme lightness, while the advantages of direct suspension would be to a great extent secured, the undulations of the roadway and the tendency to lateral swing being reduced to a minimum; and the reaction of the chains on the platform would be much diminished by the radiating play of the rods. It was shown, by means of tables, that the convergent principle admitted considerable economy of material. Two designs were exhibited, the second of which, although theoretically inferior to the first, effected a great saving in the weight of the chains, by allowing a sharper curvature. At the same time it was submitted, as a matter worthy of inquiry, whether an application of the convergent method might not be arrived at still better suited for large spans.

A mode was suggested of connecting each pair of rods with the platform, by means of a self-adjusting lever, the play of which, by equalizing the horizontal strains, would tend to diminish the derangements caused by an unequally distributed load.

It was pointed out that the gravitating tendency of the chains would cease to operate, as a source of disturbance, if their sectional weight were so adjusted (by ballasting or other means,) as to cause them to hang naturally in the curves due to the conditions of suspension.

The effect of unequal loading in bridges of multiple spans was then adverted to, as giving rise to danger, through the unequal tensions induced in the chains on opposite sides of a tower. A table was given, showing that the employment of convergent rods reduced this danger to some extent. Inverted chains below the platform were also advocated in bridges of multiple spans designed for railway traffic.

The mathematical reasoning and formulæ upon which the foregoing conclusions were based, were not considered suitable for reading aloud, they were, therefore, given separately in an appendix.—*Pro. Inst. Civ. Eng., London.*

#### IMPORTANT RAILROAD MOVEMENT.

Col. Nelson Tift, of Albany, Ga., and long identified with the railroad enterprises of that section, is now in Mobile with the object of interesting the authorities and citizens of the same in the extension of the Savannah, Albany & Gulf Railroad, now completed seventy miles to the west bank of the Altamaha. The proposition is to surrender to our neighbors the right of way, granted by the Alabama Legislature in 1853, from Mobile to a point of intersection with the Alabama and Florida Railroad; also a share of the public lands donated by Congress, in 1856, for the purpose of aiding the construction of a road from the Georgia State line to Mobile. In return for which the city of Mobile is to engage to construct the road to the intersecting point, on such terms as may seem to them best, keeping up a separate and distinct company if they please. The proposition seems to be very favorably regarded, and all in probability will be accepted. The *Tribune* says:

"A more liberal offer certainly could not be expected, and we hope that it will meet with the approval of our citizens generally. It not only favorably opens the way for the speedy construction of a road from this city to the road now being constructed from

Montgomery to Pensacola, but for a direct communication (by the Savannah, Albany and Gulf road and its connections) with all the Southern cities on the Atlantic coast, and (by the Girard road and its connections) with the middle and northern part of Georgia, and the Carolinas and Tennessee.

"The acceptance of this offer by Mobile would immediately enhance the value of the enterprise, and arouse additional interest in its favor in Savannah and along the whole line through Georgia and Alabama. It would also awaken an interest in Charleston and New Orleans, and would expedite the construction of the road now progressing from Savannah to Charleston, and the contemplated road from Mobile to New Orleans. That these two last mentioned roads will be constructed at no distant day, every well informed man believes; consequently it is fair to say, that the enterprise in which we are now invited to engage is only a part of a great Southern railroad line, commencing at Charleston and terminating at New Orleans."

#### CINCINNATI STOCK SALES,

AS THE STOCK BOARD,

MERCHANTS' EXCHANGE,  
AND AT PRIVATE SALE.

BY HEWSON AND HOLMES,

January 13, 1858.

#### BONDS.

\$3,000 Little Miami R. R. Co. 6 per cent	
1st Mortgage Bonds.....	75
\$2,700 Col. & Xenia R. R. Co 7 per cent	
Dividend Bonds, due in '60, '61, '62	
and '66.....	90
\$5,000 Cov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	55
\$1,000 Cov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	55 & int.
\$2,000 Cin., Ham. & Dayton R. R. Co. 7	
per cent. 2d Mort. Bonds.....	72½
\$3,000 Cov. & Lex. R. R. Co. 10 per cent.	
Income Bonds.....	39
\$5,000 Ohio & Miss. R. R. Co. 7 per cent.	
Construction Bonds.....	35
\$600 Indianapolis & Cincinnati R. R.	
7 per cent. Dividend Bonds.....	60
\$1,000 Cincinnati 6 per cent. Bonds.....	83
\$2,180 Little Miami R. R. Co. Dividend	
Scrip, Dec., '57.....	70 to 72

#### STOCKS

400 Sharos Ohio & Miss. R. R.....	6
25 " Little Miami R. R.....	75
60 " Cin'ti., Hamilton & Dayton.....	45
20 " Indianapolis & Cincinnati.....	45
50 " Dayton & Western.....	15
100 " Junction (Ind.).....	6¼
115 " Farmer's Bank, Ky.....	100
\$2,900 Checks on Trust Co. Bank.....	25 to 26

#### MONETARY AND COMMERCIAL.

The past week has been one of full as great stringency as was anticipated. The settlements of the *first* have occupied a larger share of time than is usual, although in amount they do not equal the average of previous years. In the early part of the week there was an evident scarcity of currency. Toward its close, however, currency was in better supply, and monetary circles began to assume a more cheerful aspect. Money is becoming more abundant rather from the contraction in its uses, than from any increase in its amount. Business houses are not creating any new debts, and are wiping out their old ones as rapidly as possible. The prospects of a favorable season during the coming Spring are decidedly fair.

The discount lines are still drawn very close, although there is an evident tendency towards greater ease in the markets. Names are scrutinized with great care, and rates are high.

Rates of exchange on the East are lower. We quote New York at ¾ to 1 premium. New Orleans par to 1 per cent. premium. Gold is at a premium of ¼ to 1 per cent.

The bank statements that we have seen are so far very encouraging.



The banks of Pittsburgh show a surplus of coin above their circulation. The bank of the State of Indiana, the Southern Bank of Kentucky and branches, and the Farmers Bank of Kentucky, show an amount of coin equal to half their circulation.

Stocks are beginning to be looked upon with more favor. Our quotations to-day show that although all securities have depreciated, yet they have not lost more in proportion than real estate.

Hewson and Holmes in their Circular of the 13th, remark:

In the past week the indications of improvement in Stock and Financial circles have been more decided and tangible than any that have occurred since the commencement of the panic. Currency is in better supply, and the amount of money seeking investment is very evidently on the increase. Capitalists and Bankers however, manifest great caution in their movements and scrutinize with great exactitude every transaction offered them.

So timid is the movement of capital towards improvement, that the occurrence at this time of any untoward event, however slight, would cause the loss of much valuable ground. While we believe that the progress towards a better condition of things will necessarily be slow, we think it will be sure and reliable; and we see nothing in the future to cast a cloud over the brightening aspect of the commercial horizon. Adversity learns us many useful lessons, and so severe have been those they have recently been called upon to bear, that they will not soon be forgotten. Very few new obligations are being made and old ones are in steady, if not rapid, process of liquidation.

Capitalists will soon cease to dictate the rates of interest and the amount of security that shall be given by the borrower; they will in future meet upon more fair and equal terms.

The transactions in the Stock Market in the past week, embrace Little Miami 6 per cent. bonds at 75. Columbus & Xenia dividend 7 per cent. at 80. Covington & Lexington 2d mortgage 7 per cent. at 55. Hamilton & Dayton 2d mortgages 7 per cent. at 72½. Ohio & Mississippi Construction at 85. Little Miami Dividend Scrip at 70 @ 72.

In the shares we have sales of Little Miami at 75. Hamilton & Dayton at 45. Indianapolis & Cincinnati at 45, and Farmers' Bank Ky., at 100.

The exchange market is very steady at ¾ to 1 prem. on New York, par on Philadelphia and 1 per cent. discount on Baltimore; on N. Orleans par to 1 per cent. prem. Gold is in moderate request at ¾ to 1 per cent.

The absorption of money in the Pork trade has been very large and still continues; the money disbursed for this purpose is finding its way back to the city in the payment of mercantile debts due from the country and is giving sensible relief to our wholesale merchants. Trade generally wears a more cheerful face with very encouraging indications of an early revival.

## Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27.

RICHARD NORRIS & SON.

## IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,

PHILADELPHIA.

[aug

RAILROAD IRON.

**LOCOMOTIVES.**

4,000 Tons rails, 58 to 61 lbs. per yard. 300 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. H. GOODMAN & CO.,

no. 7 Wall st., N.

Feb. 7. '56-2m.]

## Reliable Books for Travelers.

DINSMORE'S

R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains Official Time Tables with Reference; Combined Railroad Routes; Steam Navigation; Gazetteer. Price 25 cents, with Large Map

DINSMORE'S THIRTY MILES AROUND N. YORK, By Railroad, Steamboat, Stage, Express and Telegraph: or how to get in and out of the Metropolis. An alphabetical list of 1000 places. Price 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Funk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents.

DINSMORE & CO.,

9 Spruce street, New York

## INDIANAPOLIS,

Terre Haute, Lafayette, Chicago,

AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI  
SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

**THREE PASSENGER TRAINS!**

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

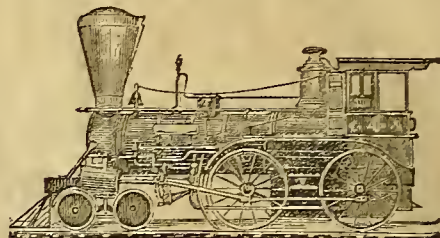
Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## Railroad Car Findings

BRIDGES & BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws, Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

**LOCOMOTIVE ENGINE LANTERNS**

From the best Manufacturers, and at their prices. Car Hand, and Signal Lanterns.

**Cotton Duck for Covering,**  
Of any required width to 124 inches.

**ENAMELLED HEAD LININGS**

Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimmings for window and Seats. Varnish, Coach Japan and Glue, Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbit Metal.

Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers,

Cambridgeport, Mass.

ALFRED BRIDGES,

Late Davenport, Bridges & Co., Fitchburg, Mass.

†oc6.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

**SUCTION & FORCE PUMP**

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

MEAL L. (The highest prize) awarded at the Ohio Mechanical Institute. June 18, 1855 F1



## TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rt.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds	Name of Company.	Quot of Stock	Length of Road	Capital	Total Funded Debt.	Gross Earnings.	Net Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	173	Albany, Litchfield & Hmpsr	54.53	173	5,000,000.00				
498,800	6			1862-3	2d "	54.53	Androscoggin & Kennebec		54.53	1,400,000.00		209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	86.5	Atlanta and LaGrange.		86.5	1,000,000.00	199,000.00	278,123.74	173,780.74	4 pr. ct. 6m
52,646	0			now	"	12.5	B'ngtr, Old T. & Milford.		12.5	135,000.00	52,646.26	39,104.40	8,671.61	8 pr. ct.
500,000	7		N. Y.	1860	"	44 5-8	Boston & Worcester.		44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	15,000 in '53
500,000	7			1865	1st mortgage.		Buffalo & State Line.			1,300,000.00				5 pr. ct. 6m.
300,000	7			1857-9-62	Income.		"							
200,000	7			1864	Domestic.		"							
577,187	6			1872	4th mortgage.		Central Ohio.							
192,200	7			1874	1st mortgage.	43	Cbamp'n & St. Lawrence		43	1,872,800.00	1,001,987.00	168,200.00	77,700.00	10 per ct.
380,000	7				2d "		"							
1,440,000	7				Domestic.	110	Ch'rl'te & South Carolina.		110	1,700,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
1,300,000	6-7-8		N. Y.		1st mortgage.	138	Cb'go, Burl'ng'n & Quincy.		138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
374,000	8				2d "		"							
					Convertible.		"							
1,300,000					1st mortgage.		Chicago, Fulton & Iowa.							
532,000					2d "	131	Cin. W'p'n'g'n & Zanesville		131	1,761,149.16	2,241,500.00	221,491.96		
104,000					3d "		"							
305,500					Income.		"							
540,000	6				Convertible.		Cleveland Col. & Cin.		139	4,741,320.00		1 3 754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	85	Cleveland & Mahoning.		85	1,500,000.00				
400,000	7			1864	2d "		"							
1,000,000	7			1873		52	Cumberland Valley.		52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-0	1st mortgage.	52	Dayton & Cin. short line.		52	1,000,000.00	1,000,000.00			
						93 6-10	Eastern Railroad.		93 6-10	3,345,400.00		665,578.79	288,407.84	\$234,133
350,000	7				1st "	130	East Ten. & Virginia.		130	625,450.00		30,897.30	19,692.30	
740,000	10			1869	1st "	20	Essex Railroad.		20	700,000.00				
88,000	7			1861	2d "	109	Evansville & Crawf'd'vle		109	2,238,657.00		243,070.42	136,061.90	\$133,281.45
400,000	7			1864	1st mortgage.		The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,847.81	3 per cent.
200,000	10					33	Fox River Valley.		33	800,000.00				
						15	Fair Haven Branch.		15	300,000.00		50,381.33	14,922.45	\$166,240.00
100,000	6				1st mortgage.	233	Georgia RR & Banking Co		233	4,156,000.00		1,068,202.59	357,689.42	\$166,240.00
100,000	6				1st "	20	G't Falls & Conway R.R.		20			27,376.69	14,207.07	
300,000	6 1-9			1858	1st "	281 1/2	G't West'n R.R. of Can.		281 1/2	4,101,550.00				8 pr. ct.
4,000,000	7			1869-70	1st "	74	Housatonic Railroad.		74	2,000,000.00		339,196.50	176,529.98	
2,000,000	7			1860	2d "	144	Hudson River.		144	4,000,000.00		1,924,382.44	718,037.40	
11,812,000	7			1875	3d mortgage.	144	"		144	4,000,000.00				
12,885,000	7			1876	1st "	704	Illinois Central R. R.		704	18,453,376.00		1,476,035.27	1031,489.08	7 pr. ct.
4,115,000	6			1876	1st "	704	"		704	3,558,376.00				3 pr. ct.
3,000,000	7			1860	Freeland.		Indiana Central.		72 4			354,871.00		
600,000	7	Nov. 1			1st mortgage.		"							
700,000	7	Jan. & July 1			2d "		"							
50,000	7			1862	1st mortgage.	13	Iron R. R.		13	123,700.00				
700,000	7						Kentucky Cen. 2d Div.			719,500.00				
							Knoxville & Kentucky.							
218,000	7				1st "	32	Laurens (S. C.) R. R.		32	166,000.00		23,233.59	14,233.59	\$8,000
1,000,000	7			1866	2d "	184	Louisville & Nashville.		184			50,234.71	14,149.13	10 pr. ct.
1,000,000	7			1875	2d "	12 35	Lowell & Lawrence		12 35	300,000.00		587,236.57	162,277.50	
2,000,000	6				1st "		Mad River & Lake Erie.			2,697,090.00				\$24,000
2,500,000	7			1868	1st "		"			2,697,090.00				
2,000,000	7			1874	2d "	26	Manchester & Lawrence.		26	1,000,000.00				
60,000	7 and 8			1867	1st "		Marietta & Cincinnati.							
420,000	8				1st "	27	Mexican Gulf R. R.		27			253,498.06	162,802.24	7 pr. ct.
320,000	8			1881	1st mortgage.	30	Milwaukee & Horicon.		30			193,732.42	55,501.74	2 pr. ct. 6m
320,000	8			1868	2d "	32	Mineral Point R. R.		32					3 pr. ct. 6m
6,000,000	6			1884	1st "	32	"		32					
500,000	7			1869	1st mortgage.	497	Mobile & Ohio.		497	10,000,000.00		253,498.06	162,802.24	7 pr. ct.
8,366,000	6	May & Nov.	N. York			15	Nashua & Lowell R. R.		15	600,000.00				2 pr. ct. 6m
32,892,600	7	June & Dec.	N. York	1864	Con. till 1859.	555	New Haven & Northm'tn		555	922,500.00		7,707,248	3,609,481	3 pr. ct. 6m
1,000,000	7			1873	1st mortgage.	133	New York Central.		133	23,067,400	14,763,807	7,707,248	3,609,481	324,891.57
926,000	7			1864	2d "		N. Y. & Harlem R. R.			5,717,100.00		1,040,593.26	64,678.71	\$37,692.30
411,700	6			1863	1st "	50	" Pref.		50	1,58,000.00		245,713.00	51,544.40	
500,000	7				1st "	66	N. Y. Prov. & Boston.		66	1,700,000.00		120,571.50		\$25,000
300,000	6				2d "		N. Lon. William'ntu & Pal.							
						5	Pontchartrain R. R.		5	500,000.00				
1,500,000	6			1873	1st mortgage.	62 1/2	N. O., Opelousa & Gr. West.		62 1/2	6,000,000.00		116,795.00	366,118.20	7 pr. ct.
1,000,000	6			1873	2d "	103 1/2	N. Y. & New Haven.		103 1/2	3,000,000.00		1,007,666.48		
2,000,000	7			1865	3d "		North Western Va. R. R.							7 pr. ct.
1,500,000	6			1859	1st mortgage.	118	"		118	2,000,000.00		600,000.00		
3,000,000	5					19 2	Northern (N. Y.) R. R.		19 2			25,176.74	88,458.56	2 1/2 pr. ct.
419,300	7			1877	"	60	North Missouri R. R.		60	2,111,500.00		304,236.33		
221,800	6			1860	"		Norwich & Worcester RR							
						94	Ogd'sb'g. Clay'tn & Rome		94			288,690.10	137,875.43	5 pr. ct.
400,000	6			1866	1st mortgage.	88 3	Ontario, Simcoe & Huron		88 3	2,957,500.00		276,539.62		
1,200,000	7			1875	2d mortgage.		Orange & Alexandria R.R.							
300,000	8			1868	1st mortgage.	47	"		47	1,500,000.00				6 pr. ct.
300,000	7			1873	1st "		Peoria & Bureau Val. R. R.							
350,000	6			1861	1st mortgage.	28 1-5	Philadelphia & Trenton.		28 1-5	1,000,000.00				
800,000	6			1864 to 1874	1st "	76	Portsmouth & Concord.		76	2,000,000.00				
				20 years.	1st mortgage.	62 1/2	Potsdam & Watertown.		62 1/2	500,000.00		68,535.42		
						86	Rutland & Washington.		86	6,000,000.00				
						168 2	St. Louis & Iron Moun. R.R.		168 2	400,000.00				
						116	Salem & St. Louis R. R.		116				19,050.64	
						26	Snd'sky Mans'p'd & New'k		26	500,000.00		75,946.06	17,378.08	
							Sullivan Railroad.							
						145	Tennessee & Alabama.		145			39,586.44		11m. 12 pr. ct
				1861	1st mortgage.	73	Terre Haute & Richmond		73	1,294,450.00				
				1840	2d "	242	Toledo, Wabash & Western		242	1,000,000.00				
				1875	3d "		Troy & Boston							
						46	Vicksburg & Jackson.		46				165,076.04	2 pr. ct.
						215	Virginia & Tennessee.		215	3,600,000.00		322,048.60		
						31	Westchester (Pa.) R. R.		31	165,000.00				
						171	Wilmington & Manchester		171					
						32	"		32					
						45 69.	Winchester & Potomac.		45 69.					
							Worcester & Nashua.							



# GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

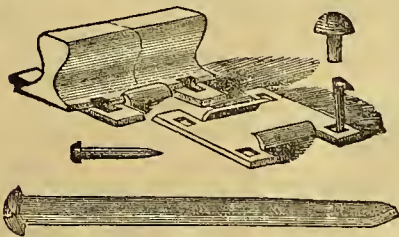
## RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

### GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.  
CORBY, COSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:30 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [jan-15] Agent.

**APPLEGATE & CO.,**  
Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, O.

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, New York City.  
ap8 Or SUMNER SMALL, Boston, Mass.

F. W. RHINELANDER.  
JAMES A. BOORMAN. EDWIN A. POST.

### RHINELANDER, BOORMAN & CO., RAILWAY AGENTS

AND

### COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.  
feb5-1y

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 298 H Street, Washington, D. C. apr12

### W. G. HYNDMAN'S



### Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

THOMAS D. STETSON,

### Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions.  
oc23

### RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-1f 10 Wall st., near Broadway, New York.

### ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.  
July 14, 1857. jr23-1m

### D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,  
Respectfully Yours,

D. M. CARHART.  
Box 1831, Cleveland, Ohio.

### T. F. RANDOLPH & BRO. Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE  
Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FREIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
July 10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE &amp; CRAWFORDSVILLE, and the TERRE HAUTE &amp; ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville &amp; Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute &amp; Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville &amp; Crawfordsville and the Terre Haute &amp; Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their Improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &amp;c.

Office No. 15 Walnut street Cincinnati, Ohio  
1057 LEE & LEAVITT.

1857. November 30. 1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops at between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &amp;c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &amp;c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office southeast corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnibuses run from the principal hotels, and call for orders left at the Ticket Offices.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Jan2

Office No. 2 Burnet House.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &amp;c., large Cuts for Show Cards, Posters, &amp;c., executed in the highest style of the art.

MIDDLETON, WALLACE &amp; CO.,

Jan8 ly 119 Walnut st., Odd Fellows' Building

1857. Summer Arrangement. 1857

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, CLEVELAND, ST. LOUIS, LAFAYETTE, DUNKIRK, LOGANSPORT, BUFFALO, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M., reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## “STEAMER BAY CITY.”

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville &amp; Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia, arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:30 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

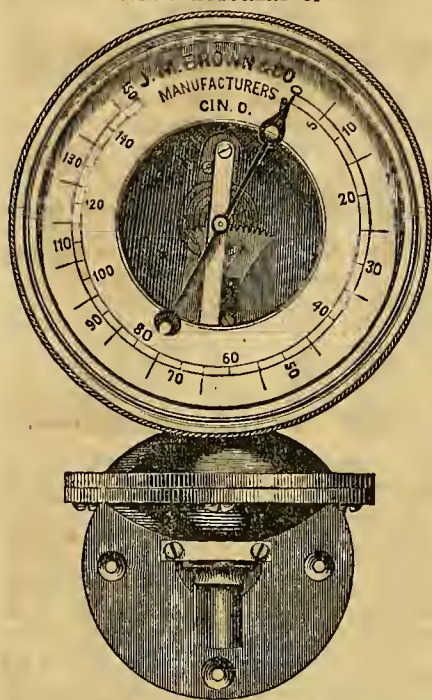
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES  
and to Set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

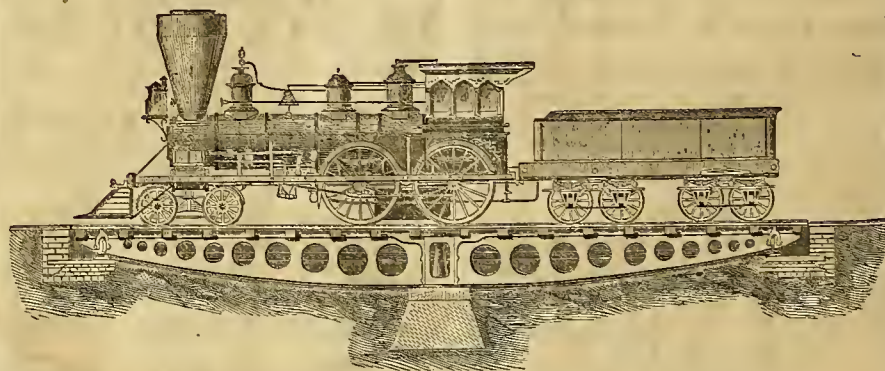
The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers & Co.

—LATE—  
BANCROFT & SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING and SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

### ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills Bolt Cutting machines, &c.

WILLIAM SELLERS,

JOHN SELLERS, Jr.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, JANUARY 21, 1858.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion	\$1 00
“ “ per month	3 00
“ “ six months	12 00
“ “ per annum	20 00
One column, single insertion	4 00
“ “ per month	10 00
“ “ six months	40 00
“ “ per annum	80 00
One page, single insertion	10 00
“ “ per month	25 00
“ “ six months	110 00
“ “ per annum	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 48.

#### EDITORIAL.

Arizona—Its Mines, and Railroad..... 709

#### RAILROADS.

Tennessee and Alabama Central R. R.....	710
New York & Erie R. R.....	711
Reading R. R. Co.....	713
Missouri R. R.....	713
Michigan Cent. R. R.....	714

#### MISCELLANEOUS.

Tonnage Tolls.....	715
Hannibal, St. Joseph & Iron Mountain E. R.....	715

#### MONEY AND STOCKS.

Monetary.....	716
---------------	-----

### A STARTLING FACT.

The New York *Courier and Enquirer*, says:—

**A TERRIBLE RECORD.**—The number of Coroner's Inquests held within the City and County of New York during the past year, is stated to have been 1908, of which 13 were cases of murder, 56 of homicide, 68 of suicide, 369 of organic disease, 1402 of accidents.

From the above it will be seen that the number of deaths in New York, by violence, during the year 1857, was 1539.

The number killed by railroad accidents during the same period throughout the whole United States, was 130—one-twelfth the number of those destroyed by a violent death in the City of New York alone.

**MAD RIVER & LAKE ERIE R. R.**—We learn that this company has broken connection with the Cincinnati Hamilton and Dayton R. R. which has hitherto and very naturally, found its way into Cincinnati. The cause of the dispute it is said to be an unsettled balance of \$20,000 claimed by the Cincinnati Hamilton & Dayton R. R. on the sale of a Lake Erie Steamboat. It is confidently stated that the Mad River & Lake Erie road will hereafter run its trains into the city over the Springfield & Xenia & Little Miami Railroads.

### ARIZONA—ITS MINES, AND RAILROAD.

*A Memoir showing how to bring the Lead, Copper, Silver, and Gold of Arizona into the Marts of the World, and project of a Railroad through Sonora, to connect with the Pacific Road in Arizona.* By Capt. T. J. CRAM, U. S. Top. Engineer.

Being acquainted with Captain Cram, and well knowing his thorough qualifications, for such an examination, as this subject requires—we took up this pamphlet with much interest, and shall give a digest of its contents for the benefit of our readers.

Captain Cram first notices New Mexico, containing a territory of 250,000 square miles, and it is said much gold and silver—but which he says truly, cannot be made available, without any interior rivers, or navigable streams, to out-ports. But, he says, that these are not there, and for Railroads, even if they could be made, the Mexican province of Sonora stands in front, that is, towards the South-West, the best direction.

Of Arizona, Capt. Cram thus speaks:—

“ARIZONA, or that portion of New Mexico south of the Gila River (known as the Gadsden purchase,) contains 45,700 square miles: and there is surface enough in it for a State about equal in size to Tennessee; but at present little is known of the proportion of waste land in it, and therefore it cannot be said how well it would compare in respect to the amount of its cultivable surface. In many places it would grow cotton, wheat, fruit, sugar and hemp in the greatest abundance; but the natural directions of the lines of trade or export of any surplus staples are not east and west: they are towards the south, and therefore intercepted by Sonora.

The organization of Arizona into a separate territory, would no doubt have the desirable tendency in some degree to Americanize that district; and the construction of a railroad through it from the Rio Grande to the Colorado, thence to our Pacific coast, would greatly facilitate the development of its emboweled wealth into a condition of practical utility; but it would not answer all the requirements essential to render Arizona a promising State. It should be put in possession, or within convenient reach of a sea-front having one good natural harbor at least.

From the heart of Arizona to San Diego Harbor is 663 miles. Taking this distance, as the shortest to the Pacific, Capt. Cram comes to another and important idea. It is this.

Now, suppose the Pacific Railroad constructed on the southern route to San Diego; this 663 miles would be the mean or average extent of land transportation for imports and exports of Arizona: whereas, the distance from the heart of Arizona to Guaymas—a most excellent harbor of great capacity in Sonora, on the Gulf of California, would be only about 300 miles; and from the eastern portion of Arizona down through the valley of the Yagui River to Guaymas, it would not exceed 350 miles; and it is also to be observed, that the valleys of Sonora trend, in their general direction, southerly—affording natural routes from Arizona to the sea-ports on the gulf. From the head of the gulf coastwise

to Guaymas, it is only about 400 miles, and in this sea-front there are several small ports.

We have then the very important fact, that by a Railroad only 300 miles in length, all the object can be accomplished, which can be by a Railroad to the Pacific. From tables furnished in this memoir, it appears, that Guaymas is 450 miles nearer (on any route) than San Diego to either New York, or New Orleans. If then we possessed Sonora, we could gain a point on the ocean, 520 miles nearer, than by going up the Colorado to Fort Yuma, and 816 miles nearer than by going around by San Diego.

Arizona is by no means a newly known district. It was settled in many places more than a hundred years ago by Spaniards who were attracted thither by the representations of the Jesuit Missionaries, of the precious metals it was known to contain. Many of the small valleys were cultivated and produced all that was required for home consumption of those engaged in the mines. No sooner, however, had the district well begun to thrive, than troubles commenced with the powerful tribes of Indians to the immediate north, and what little leaven of civilization had been introduced by the Jesuits, was swept away by these savages, who, ever since, have devastated the country and driven out all or nearly all persons attempting to work the mines. It is in this way that this valuable district has been kept down.

Capt. Cram thinks that with a territorial organization, and two Regiments of U. S. troops, this state of things would be changed: the Indians kept quiet, and civilization renewed.

With such an organization and so protected, the copper mines alone—that are as well known to exist in Arizona as that coal mines exist in Pennsylvania—would justify the construction, at the present time, of a railroad from the heart of the district, 300 miles to the mouth of the Gila, or 300 miles down through Sonora to Guaymas. The latter route would be the most profitable not only to Arizona, but likewise to the capitalists embarking in the enterprise. The former route, however, would subvert the interest of the greater project of the Pacific Railroad, whilst the latter would meet with an obstacle in our non-possession of Sonora.

The object of Capt. Cram is to throw his idea of a Railroad from the heart of Arizona to Guaymas, before the public, and it is done in the briefest, but most effectual way. Of what may be expected from Sonora, Capt. Cram thus speaks.

It has many beautiful and luxuriant valleys, watered by as many beautiful rivers. Of these, the Yagui, which enters the Guaymas Harbor, is the most extensive. The length of this valley is about 300 miles. The agricultural products of this Department are very considerable, including sugar and wheat. But the sources of the greatest wealth are the mines, from which millions of dollars in silver are obtained and exported from Guaymas annually. Sonora has been greatly ravaged, as well as Arizona, by the Apache Indians; and from this cause the development of its vast wealth has been sadly retarded. Under



an enterprising population, with a good government, it is not extravagant to say that the mines of Sonora would yield from 50 to 80 millions per annum immediately; and that through the port of Guaymas and the valley of the Yagui commerce would receive an impetus not inferior to that realized through the Golden Gate and the Sacramento valley, from the gold mines of the western slope of the Sierra Nevada in California.

There can be no question, that for the purpose of developing Arizona or New Mexico, a railroad to the Port of Guaymas on the Gulf of Mexico, would be far more beneficial than one to either the Atlantic or Pacific, great as they would be. We understand that parties interested have already procured a charter for a railroad from Arizona to the Port of Guaymas. A charter, however, will not answer, without that protection and countenance which the government alone can give to capitalists. That the road would, in itself, be profitable, we have little doubt. But, the attacks of Indians and the vacillations of the Mexican Government, and the uncertainty of titles, would prevent capitalists from undertaking the enterprise. To us, it seems a great blunder, that in the acquisition of California or of Arizona, we did not acquire a part of the Gulf coast, so as to make a nearer and easier outlet to the ocean. And now, we think it a far wiser, and cheaper mode of acquiring valuable territory, to purchase Sonora than to buy Cuba, or to encourage Fillibusterism in Central America. The former would return in countless millions in money; the latter would waste both life, and treasure.

**CINCINNATI AND MACKINAW RAILROAD.**—A meeting of the stockholders of the Ohio section of this road, which is to connect with Amboy, Lansing and Grand Traverse road at the Southern line of this State, was held at Dayton, Ohio, on the 21st inst. The several reports of the officers of this road, showed the enterprise to be in a highly favorable condition. The work on the line of the road has progressed steadily and has been managed with a strict economy. Mr. Hodder, who has charge of the local subscription, reports that the people along the course of the road are most favorably disposed toward it and anxious for its completion. He also reported \$120,000 of new stock recently subscribed.

One of the principal objects of the meeting was the election of directors and officers for the ensuing year. A considerable quantity of stock was represented, and the holders were in good spirits. The following, which is pronounced to be a very excellent Board of Directors, was elected: William Gunckle, Alfred Kitchen, Peter Depuy, H. Elliott, P. W. Norris, Alfred J. Hodder, J. F. Beaver.

The following officers were chosen for the ensuing year.

**WILLIAM GUNCKLE, President; H. ELLIOTT, Secretary; ALFRED KITCHEN, Treasurer; Gunckle, Elliott and Kitchen, Executive Committee; Col. H. A. FRANK, Chief Engineer; H. A. Hodder, General Agent.**—*Detroit Tribune.*

## Railroads.

### TENNESSEE AND ALABAMA CENTRAL R. R.

We have received the Fifth Annual Report of this Company, made 16th of November, 1857. This road, when completed, will run from Montevallo on the Alabama & Tennessee Railroad as its southern terminus to Columbia on the Tennessee & Alabama R. R. as its northern terminus, in nearly a due north line, and when the chain of roads connecting Montevallo and Columbia respectively with Mobile and Louisville shall be completed, it will form part of nearly an air line from Louisville and Cincinnati to Mobile. The portion now in process of construction extends from Decatur on the Memphis & Charleston Railroad to the Tennessee State Line.

The Southern Division commences two miles north of Decatur, at the point of junction between this road and the Memphis and Charleston Road, and runs north to the town of Athens, and is 12 25-100 miles long.

The Northern Division begins at Athens and terminates at the Tennessee line, where it forms a junction with the Central Southern Railroad, and is 13 86-100 miles long.

The report of the President says:

On the 19th day of December, 1853, the Legislature of Alabama granted to your road a Charter, with provisions of incorporation, as liberal as those granted to any Railroad in our country, and on the 14th day of December, 1855, it was further enacted by the Legislature of Alabama, that in pursuance of the wish of the people of Limestone County, as expressed at an election held for that purpose, on the 1st Monday in May, 1854, and reaffirmed at an election held on the 1st Monday, in August, 1855, that the Court of County Commissioners for said County, be empowered, and required, in behalf of said County, to subscribe for Stock, in the Tennessee and Alabama Railroad Company, to the amount of two hundred thousand dollars, upon conditions that no assessment of taxes should be made, until an amount of good and solvent subscription should be made to the capital stock of the Company, which, including the two hundred thousand dollars, raised by virtue of this act, should be sufficient, according to the estimates of a competent Engineer, based upon an accurate and thorough survey, to construct the said Railroad across the said County of Limestone. The terms and conditions of this act have been fully complied with, and the Court of County Commissioners have promptly issued the Bonds for two hundred thousand dollars, and ordered the collection of the first annual instalment, of twenty thousand dollars, falling due March 1st, 1858, and the Directors feel greatly gratified by the liberal spirit that has been manifested in every portion of the County in meeting this tax.

On the 27th day of December, 1856, the entire work from the junction with the Memphis and Charleston Railroad, to the junction with the Central Southern Railroad, at the Tennessee State line, was awarded to responsible and energetic contractors; and the letting, although at fair rates to the contractors, was upon such terms as to meet with the commendation of railway men throughout the country.

The grading has progressed without interruption during the last ten months, with a large force, and the contractors have manifested a commendable spirit in their efforts to complete their work by the time specified in their contracts. By the 27th day of March next, the twelve miles south of Athens will be graded, and owing to the manner in which the forces have been worked, we will be able to commence track-laying at any time after the 1st day of January. The northern division has been pushed with equal energy, and will be graded by the 27th day of December, 1858.

The following is the estimate for the construction of the road:

From Southern Junction to Athens.....	\$163,812 00
" Athens to the Tennessee line.....	202,799 00
Total.....	\$366,611 00

To meet the above estimate, we have:

Individual Subscription.....	\$173,929 00
Corporation of Decatur.....	10,000 00
Memphis and Charleston R. R. Co.....	30,000 00
Contractors.....	40,000 00
Limestone County.....	200,000 00
Total.....	\$453,929 00

Leaving a very handsome balance of..... \$87,318 00 to be applied to the purchase of rolling stock and buildings.

Those who are at all familiar with the manner in which Railroads have been built throughout the country, must at once be struck with the healthy condition of your finances. We have avoided words and figures to mystify the condition of the Company, but have given a simple statement of the cost of your road, and from the Treasurer's books have shown what we have to meet that cost. Certainly the result presents a flattering earnest of a complete and early triumph of your enterprise.

Through J. J. Howard, Esq., our duly appointed agent, a contract has been made with Theodore Dehon, of New York City, for 1300 tons of the very best T rail, of approved pattern, and upon terms satisfactory to the Board. By this contract we have secured iron enough to lay the entire track south of Athens, with all necessary side tracks—and a balance of about two miles. Spikes and chairs have also been purchased to lay the Southern Division.

Arrangements have been made with the Memphis and Charleston Railroad Company, by which they become stockholders in your road, to the extent of the freight on your iron, chairs, spikes and other materials, for



the construction and equipment of your road.

We have also made a satisfactory, and we believe equitable, contract with that Company, for the use of their track, from the Junction into the town of Decatur.

By this arrangement our trains pass directly over the Memphis and Charleston Railroad, without detention or change, the said Memphis and Charleston Railroad Company, reserving the right only, to make such regulations in schedule of trains, as to guard all parties against accident. For the use of their track, we are to pay according to the number of regular trains run; if the Memphis and Charleston Railroad Company run nine trains per day, and the Tennessee and Alabama Central Railroad Company one, we pay an interest of eight per cent. per annum, or one-tenth part of the cost of that portion of the road jointly used, and do one-tenth part of the repairing of the same. We are pleased to avail ourselves of the present opportunity of acknowledging the friendly feeling that has been exhibited by the President and Directors of that road toward your work, and we trust that it may be to the interest of all parties to perpetuate the feeling.

The iron, chairs, and spikes that have been purchased, will require an expenditure of about \$90,000; eighty of which we will have to meet by the 1st day of March, 1858.

The means for meeting this debt are ample, but the method of reaching and applying said means, with the least possible loss to the Company and to suit the convenience of the stockholders, is a question of peculiar interest to the Directory. In the present depressed financial condition of the country, even if desirable, it would be folly for us to enter a foreign market to raise money, to build your road. We have at home, as shown above, more money than is actually necessary to complete your road; then why place ourselves at the mercy of brokers and shavers to suffer a ruinous rate of interest? We propose to make the amount subscribed upon your books, together with the County Bonds, build the road, and without the usual debt that overhangs almost every enterprise of the kind in the country.

If the plan we propose meets with the approbation of the Stockholders, and they can be induced to respond in material substance, the task becomes comparatively light, and the early completion of the road may be confidently relied on, whilst the Stockholder soon receives an ample reward for his investment, in the shape of semi-annual dividends.

If we can meet with no support from this quarter, then the completion of your work becomes a question of time; we must either wait the payment of the County Bonds by the Commissioner's Court, losing thereby a heavy interest account upon the money already paid out upon the work, or incur a large foreign

debt, thereby greatly depreciating the value of your stock, and rendering the payment of dividends remote. To avoid this, we propose to sell a sufficiency of the County Bonds, on terms equivalent to a handsome interest, to meet our present demands.

The Tax Books of Limestone County show a very large surplus capital at interest, for the want of some safe and more profitable investment. An opportunity for using a portion of this money is now presented, and it becomes the duty of every friend of the enterprise to step forward and take his share of these bonds.

They are not only secured by the faith and pledge of a law abiding people, but the whole road, with its iron, buildings and rolling stock is pledged to the holder of these bonds, as additional security.

The geographical position and connections of your road are of a most important character; upon this point the most skeptical should be satisfied, by a glance at any railroad map. Resting your southern terminus at Montevallo, we have, through the Nashville and Louisville, Tennessee and Alabama, Central Southern, and Alabama & Florida Railroads, almost an air line, from Louisville or Cincinnati to the Gulf, at either Mobile or Pensacola. Throughout the entire distance, we have a country abounding in Mineral and Agricultural wealth.

That portion of your road now under contract, and to which this report especially refers, possesses, in a high degree, the elements of a paying road; with a direct connection with Memphis and Nashville, over roads built in a most substantial manner, with light gradients and curvature, and passing through a thickly populated and richly cultivated country, embracing almost every branch of agriculture and manufacture, its business must be large, and the unprecedentedly low cost of your road, must make the stock profitable.

By referring to the *Share List* of any railroad papers, the Stockholders will find a large number of roads throughout the country, paying handsome dividends, although built at a cost greatly exceeding that of your own road, and having an inferior geographical position.

Before closing this report, it is proper to remind you of the importance of a Montevallo connection, and of taking the necessary steps, as soon as practicable, to have at least a thorough survey made of the line from Decatur South. We deem it unnecessary to enter into an exhibit of the vast and profitable results that must flow from the inexhaustible field of minerals through which that portion of your road passes, and the full benefit arising from your geographical position can not be realized until that connection is made.

By recapitulating the figures given above, we arrive at the following gratifying facts:

- 1st. That your entire road of 26 11-100 miles, from the Southern Junction to the State line, including every expenditure, will cost.....\$366,611 00
- 2d. That the total expenditures of every character, up to the present time, have been 69 372 50
- 3d. That the amount required to complete your road, is.....\$297,238 50

The following are the Directors for the ensuing year:

Jonathan McDonald, Luke Pryor, Thos. H. Hobbs, James W. Sloss, Jno. R. Mason, W. W. Philips, Thomas Redus, Henry Fennel, and J. C. Orr.

On motion, the Convention adjourned, *sine die*. JNO. N. MALONE, *Chairman*.

JNO. T. TANNER, *Secretary*.

#### NEW YORK AND ERIE R. R.

President Moran has issued the Annual Report of this Company for the year ending Sept. 30, 1857. As we have not been favored with a copy of the document, we insert a notice and extracts taken from the columns of the *New York Tribune*. The President evidently feels constrained in this report, as in almost every other printed document which he has issued, to set forth that his high salary, his \$25,000 per annum, could only be justified by the extraordinary circumstances in which the road was placed. It only remains for the stockholders to follow out this course of reasoning, and they will justly conclude that the continuance of these extraordinary circumstances alone will justify a continuance of such extraordinary salaries. The question will next arise how long these circumstances will last, and how long these salaries will continue. The *Tribune* says:

The President of the Erie Railroad Company has just issued the Annual Report of Company for the year ending Sept. 30, 1857, Commencing with a personal explanation in regard to his connection with the Company, Mr. Moran proceeds to comment upon the business of the year, giving as causes for the reduction of gross earnings and increase of expenses and repairs, the engineers' strike, a severe Winter, and an extraordinary freshet. The result of these was a diminution of the receipts of the first nine months of the fiscal year of \$534,398 68, and an increase in the running expenses and repairs of track of \$484,337 93, reducing the net revenue \$1,018,736 61 on the corresponding period of the preceding year. At this point Mr. Moran assumed the duties of President. He found the Company engaged in various extensive improvements, requiring large expenditures, while its credit was prostrated by a resort to the same policy which had produced a similar result in 1854—referring to the execution of the chattel mortgage to Mr. Drew, to secure that gentleman's personal indorsement to the amount of \$1,500,000 during six months. To this last measure Mr. Moran attributes the destruction of the Company's credit, on account of the distrust which such a pledge of property created. Mr. Moran entered vigorously upon the duties of his office, and has introduced various measures of reform in expenses and general management, and directed attention to the condition of the Road and equipment; and the result has been as satisfactory as could be expected under the embar-



raised financial position of the Company. The efforts to restore the credit of the Company were at first successful; but, in October, the general disturbance in financial affairs compelled them to succumb. Following up this branch of the subject, Mr. Moran says:

To the past and the future we must look for that encouragement which the present is entirely devoid of. The present embarrassments of the Company are the results of temporary causes, which will shortly disappear, and produce no other effect on the future than to aid its managers in avoiding the recurrence of similar difficulties. These embarrassments should not discourage you or the public, in regard to the future of this great enterprise, which rests on a basis too solid to be affected by them. This is proved by the fact that the gross receipts of this Company, since its opening to Lake Erie, have been for the fiscal year ending 1st of October,

1852.....\$3,537,766 1855.....\$5,488,993  
1853.....4,318,902 1856.....6,349,050  
1854.....5,359,958 1857.....5,742,606

This shows an annual augmentation of about \$1,000,000, with the exception of 1855 and the present one. The receipts of 1855 were diminished by the short crops of the previous year throughout the West, as well as by the declaration of war in Europe, which greatly affected all commercial operations; yet, notwithstanding all this, the revenue of the Company showed a slight increase. In the past year, notwithstanding the deficiency of the crops of 1856, and the light Spring and Summer traffic consequent thereon, the revenue of the Company would have shown a similar result had it not been for the diversion of traffic to competing lines, from the causes already enumerated.

An attentive examination will clearly prove that there is nothing in the present financial position of the Company, which need injuriously affect its future prosperity or value. Its total capital and debt at present is less than \$37,000,000. The total cost of the New York Central Railroad, reaching only from Lake Erie to Albany, is already \$39,000,000, and to enable its traffic to reach New York, it has to use the Hudson River Railroad, which cost \$13,000,000, thus making a total of \$52,000,000, to reach from Lake Erie to New York City. If we add to the cost of your road the capital represented by your leasehold property, the total capital invested in the road and equipment of the New York and Erie Railroad Company is \$38,000,000. Of the present floating debt, \$1,200,000 is the balance of the cost of the second track, which the loan of \$4,000,000 was not sufficient to liquidate. The balance of the floating debt has been mostly expended on the Long Dock improvement, so that it is evident that nearly the whole of the increase of the Bonds in the hands of the Sinking Fund during the past two years, has been purchased with the earnings of the Company, notwithstanding the sad result of the traffic of the past fiscal year.

The scheme now before the public to extricate the Company from its present financial embarrassments, appears to me to be the only feasible one. It appeals to the interests of Bond and Stockholders, for the means required by the Company. To the first, it offers an opportunity to exchange their unsecured Bonds into Mortgage Bonds, perfectly secured, as the entire issue is limited to \$19,000,000, while the present cost of the

property of the company exceeds \$38,000,000. To the latter, it presents an opportunity to save their property without risk, for the small advance asked them is perfectly secured. If the entire loan be taken, there can be no doubt that this Company will soon enjoy greater prosperity than at any previous period; and, by a rigid adherence to a correct system of administration, all future embarrassments will probably be avoided. To this end, no new expenditures should be undertaken without first securing the means necessary to meet them.

By the annexed statement it will be seen that the

Gross Revenue of the fiscal year ending 30th Sept., 1857, amounts to.....\$5,742,606 51  
Ordinary Expenses, including Taxes, and items marked\*.....\$1,054,681 35  
Extraordinary Expenses—Bad Debts and Patent Right.....134,597 91  
Construction Account—expenditures for new Structures and Equipment.....99,345 39  
4,988,574 85  
Leaving applicable to Interest on Debt, and Rent of Union Railroad.....\$1,454,031 86  
Whereas, these items amount to.....1,933,327 56

Leaving a deficit of.....\$479,295 70  
Less profit on Bonds purchased for Sinking Fund, and Interest in Bonds in hands of Sinking Fund.....190,946 41

Actual deficit on the year's operations. \$288,349 29

This result is also proved by

Increase of Floating Debt, Bills and Accounts payable.....\$1,131,033 53  
Decrease of Cash, Fuel, Bills and Accounts receivable.....545,760 86  
Total.....\$1,677,394 39  
Less—Increase Long Dock investment.....\$744,042 30  
Increase other Assets and Materials.....53,002 80  
Decrease of Bonded Debt by Sinking Fund.....592,000 00  
1,389,045 10

Increase of Liabilities over Assets.....\$288,349 29

The annexed tables accompany the report:

COMPARATIVE STATEMENT of Earnings, Expenses, &c.—1847 to Sept. 30, 1857.

Year.	Earnings.	Expenses.	Expenses per cent.	Earnings per Mile run.	Expenses per Mile run.
1847.....	\$ 254,119 08	\$172,970 63	67.6	\$1 59	\$1 09
1848.....	310,913 25	195,508 49	62.5	1 53	96
1849.....	810,143 62	508,926 21	62.8	1 56	79
1850.....	1,139,559 61	623,948 06	54.8	1 62	89
1851.....	2,359,870 70	1,277,630 49	54.1	1 62	88
1852.....	3,537,766 53	1,871,167 10	52.9	1 44	73
1853.....	4,318,902 36	2,518,781 08	58.3	1 52	89
1854.....	5,359,958 68	3,007,516 54	54.0	1 81	1 01
1855.....	5,488,993 37	2,881,875 21	52.1	1 72	89
1856.....	6,349,050 15	3,201,996 42	49.6	1 98	1 00
1857.....	5,742,606 51	4,054,631 35	70.6	1 68	1 32

BALANCE OF GENERAL LEDGER, SEPT. 30, 1857.

	Dr.	
To construction.....	\$24,033,680 16	
To Union Railroad improvement.....	435,643 77	
		\$24,469,323 93
To Cash and Cash Items on hand.....	21,467 71	
To Materials on hand.....	547,336 05	
To Fuel on hand.....	572,371 70	
		1,141,175 46
To owners of Lake Erie Steamers.....	40,000 00	
To owners of Lake Erie Propellers.....	191,228 84	
To Roll. Stock, &c., bought of Can. and Niagara Falls R. R. Co.....	100,000 00	
To Real Estate.....	6,447 09	
To Bonds Buff. Corn'g and N. Y. R. R.....	9,000 00	
To Bonds of the City of Toledo.....	100 00	
		346,775 93
To Discount on Bonds, due 1875.....	607,885 87	
To Sinking Fund.....	1,336,000 00	
To Long Dock Company.....	715,700 72	
To rent of Long Dock prop.....	28,341 58	
		2,737,928 17

To unadjusted Accounts.....	25,957 14	
To Bills and Accounts Receivable.....	360,267 83	
		386,264 97
Total.....		\$39,031,468 46
By Capital Stock issued, including Div. No. 6.....		\$11,000,000 00
By first Mortgage Bonds, due 1859.....	\$3,000,000 00	
By Second Mortgage Bonds, due 1871.....	4,000,000 00	
By Convertible Bonds, due 1871.....	4,351,000 00	
By Convertible Bonds, due 1882.....	3,500,000 00	
By Mort. Bonds, due 1883.....	0,000,000 00	
By Sinking Fund Bonds, due 1875.....	4,000,000 00	
By Acceptances, due 1860.....	40,440 00	
		24,291,000 00
By Bills and Ac'ts payable.....	2,707,152 30	
By Balance of Transportation Account.....	482,316 16	
		3,190,468 46
Total.....		\$39,031,468 46

#### MEMORANDUM.

Total Earnings for the year ending September, 30, 1857.....\$5,742,606 51  
Transportation Expenses 66.9 per cent.....\$3,854,812 82  
Loss on running Buffalo and New York City Railroad to Dec., 1856.....21,018 14  
U. S. Post Office, claim not allowed, Sundry Bills for over charges, damages, &c.....37,065 62  
Canandaigua & Elmira R. R. Co., bad debt.....15,772 28  
Canandaigua & Niagara Falls R. R. Co., bad debt.....10,462 69  
Lake Erie Steamers, 1855 and 1856.....5,376 21  
Old Judgment for Personal Damages.....17,296 24  
N. York Station, old account, bad debts, &c., 1852 to Sept. 30, 1857.....57,228 40  
Risley and Squires, account of Propellers.....1,244 05  
D. C. McCallum, right to a bridge patent.....5,000 00  
Fuel consumed by fire.....6,585 10  
Expenses prior to Sept. 30, 1856, paid since.....33,427 48  
New York Central R. B. Co. Excess of Emigrant business.....18,677 52  
Taxes.....62,075 47  
Cost of Cars to replace those destroyed, and original cost of Cars destroyed but not replaced from Sept. 30, 1856, to Sept. 30, 1857.....51,987 24  
Total Expenditure.....\$4,189,229 36

Balance.....\$1,653,377 25  
Interest on Funded Debt.....\$1,739,570 00  
Interest on Floating Debt.....110,337 56  
Rent of Union Railroad.....83,400 00  
1,933,327 56

Interest on Debt, Taxes and Expenses over Earnings.....\$379,930 31

Not being in possession of the full report of the Company, we do not feel at liberty to criticise, very closely, the few extracts we give above. We shall merely put together a few of the statements of the total capital and debt of the road, as given in this and other documents over the signature of President Moran.

In the circular dated Aug. 17, 1857, he gives the capital and debt as follows:

Capital Stock.....\$11,000,000  
Funded debt.....\$24,891,000  
Floating debt.....2,002,135  
Unprovided Interest.....132,285

Total debt.....27,025,420

Total cost of road and equipments.....\$32,025,420

In the circular of Sept. 30, the same items are given as follows:

Capital.....\$11,000,000  
Funded debt.....\$24,891,000  
Floating debt.....2,437,209  
Unpaid Interest.....69,000

Total debt.....27,397,209

Less sinking fund.....\$38,397,209  
1,856,000

\$37,011,209



In the exhibit published above, Mr. Moran gives as the Balances of the General Ledger in Sept. 30, 1857:

Capital Stock.....	\$11,000,000 00
Funded debt.....	24,891,000 00
Bills and Accounts Payable and balance of Transportation Account, (Floating Debt).....	3,190,468 46
Total capital and debt.....	\$39,081,468 46

Here there are three different statements bearing dates within fifteen days of each other, and yet differing in the aggregate from one to two million dollars.

A fourth statement is added in the report copied above, where Mr. Moran says that "an attentive examination will clearly prove, that there is nothing in the present financial condition of the company, which need injuriously affect its future prosperity or value. Its total capital and debt at present is less than \$37,000,000." The lowest of the three detailed statements above is \$37,011,209.

We put these statements together, not in the spirit of captious criticism, but that Mr. Moran may see the necessity of a uniformity of statements, if he would command the confidence of the public, and especially of capitalists.

#### READING RAILROAD COMPANY.

The Annual Report of the Reading Railroad Company has been published, and the figures show that after paying a dividend of 4 per cent. in July last, and retaining a renewal fund of \$120,000, which is certainly small enough for such a road, the surplus on the 30th November, was only \$133,668. The receipts of the road for the year ending Nov. 30, 1857, were:

Travel, 281,679, equal to 107,039 through passengers.....	\$ 287,534
Merchandise freight, 187,607.04 tons.....	329,985
Coal Freight, 1,769,679.19 tons.....	2,412,923
United States Mail and sundries.....	35,079

Total gross receipts.....	\$3,065,521
Working expenses—transportation and roadway.....	\$1,388,656 21
Drawbacks and allowances.....	143,059 01
	1,481,745

Net profit for the year.....	\$1,583,776
Total interest for the year on bonded debt.....	\$419,466 00
Renewal Fund.....	120,008 21
	539,474

Dividend for the year.....\$1,044,302  
Which has been disposed of as follows:

Dr. balance of interest account.....	\$164,218 85
Dr. balance of renewal fund.....	96,019 40
Sinking Fund.....	100,000 00
July Dividend, 4 per cent.....	447,497 18
State tax on dividend.....	44,741 71
Taxes on real estate.....	11,602 05
Reserved for January dividend, preferred stock, 3 per cent.....	46,554 00
	910,633

Surplus.....\$133,668

The decrease in the coal tonnage for the year is 379,211 tons, and the decrease in the profits on carrying coal \$655,963. The decrease in merchandise carried is 14,268 tons. There is an increase of \$43,886 in passenger traffic. The cost of transportation shows an increase.

The following statement, in which these are included, exhibits the exact amount of net profit earned during the last two years, which, compared, give the following result, viz:

	1856.
Gross receipts.....	\$3,913,742 03
Expenses & draw-backs.....	\$1,824,836 51
Renewal, etc.....	144,663 40
	\$1,969,019 91
Net profit in 1856.....	\$1,944,722 12

	1857.
Gross receipts.....	\$3,065,521 56
Expenses & draw-backs.....	\$1,481,745 22
Renewal, etc.....	220,008 21
	\$1,601,753 43
Net profit in 1857.....	\$1,463,768 13

Decrease.....\$480,953 99

The average rate of net freight and tolls on coal was, in 1856, 155 22-100 cents per ton carried; and in 1857, 141 13-100 cents per ton carried.

The percentage of expenses of gross receipts was, in 1856, 46 $\frac{3}{4}$  per cent.; and in 1857, 48 $\frac{1}{4}$  per cent. Or, allowing 6-9-10 cts. for difference of dumpage, charged in the former and not in the latter, the average rate for 1857 is 7 19-100 cents less than in 1856, and the percentage of expenses will be found to be about the same in both years.

The actual amount of net profit from the business of the last year, was.....	\$1,463,768 13
Deducting interest for the year, viz:	
On Bonded Debt.....	\$419,466 00
On other Debts.....	164,218 85
Total Interest.....	\$583,684 85
Balance of Renewal Fund.....	96,019 40
	679,704 25

There remains a Dividend Fund of.....\$784,063 88

Equal to 7 per cent. on \$11,375,541 22, the amount of the Capital Stock of the Company.

The managers express themselves satisfied, under the circumstances, with the result of the year's business. The entire present surplus is \$763,016 12, which will hereafter be absorbed by the loss on bonds used in the settlement of the floating debt, and any deficiency in the value of the assets now held by the Company.

The sinking fund account, on 30th November, 1856, consisted of.....	\$137,111 71
Add bonds converted—1870.....	\$27,000
1860.....	24,000
	51,000 00

Balance, 30th Nov., 1857.....\$188,111 71

To this there will be added the amount of bonds yet to be purchased with the sum at the credit of the sinking funds, viz: \$73,244 08—which, owing to the financial difficulties of the Company, has not yet been invested. An addition to the amount appropriated to the renewal fund is recommended, as the present amount is insufficient to meet the requirements of the road. The addition to the cost of the road during the year has been \$99,568 97. The total amount of the unfunded debt is \$3,150,922 05.

The managers are of opinion that no dividend should be paid while any floating debt is outstanding. How long it may require for this purpose must depend upon the sale of bonds and realization of assets; but they think there is no reason to doubt the settlement of all the floating liabilities of the Company in the course of this year. The intention of the managers had been to consolidate with the Lebanon Valley Road, but a temporary injunction has been obtained to prevent it.

☞ The receipts of the Milwaukee and Mississippi Railroad Company foot up to \$41,500.

#### MISSOURI RAILROADS.

The following article is taken from the columns of the St. Louis Republican:

The whole amount of Bonds authorized to be issued to the railroads by existing acts, is \$24,950,000, distributed among the several roads as follows:

To the Pacific, Main.....	\$7,000,000
To the Pacific, Southwest Branch.....	4,500,000
To the Hannibal and St. Joseph Road.....	3,000,000
To the North Missouri Road.....	5,500,000
To the Iron Mountain Road.....	3,600,000
To the Cairo and Fulton.....	650,000
To the Platte Country Railroad.....	700,000

Of this amount, there had been issued at the date of Gov. Jackson's Message to the Legislature, October 13, \$15,930,000, which amount, as we understand, has not been increased since. Of this issue there have been delivered to the—

Pacific Railroad, Main stem.....	\$6,350,000
Pacific Railroad, Southwest branch.....	700,000
Hannibal and St. Joseph Road.....	3,000,000
North Missouri Road.....	3,150,000
Iron Mountain Road.....	2,600,000
Cairo and Fulton.....	100,000

Total issued.....\$15,930,000

By the recent act of the Legislature, of the balance not yet issued authority is given to issue, at the discretion of the Governor, \$1,326,000, to be divided among the roads as follows:

To the North Missouri.....	\$250,000
To the Iron Mountain.....	475,000
To the Pacific, Main.....	400,000
To the Pacific, Southwest Branch.....	200,000

Total.....\$1,326,000

The same act authorizes a further issue of the bonds heretofore authorized to be issued, to the amount of \$1,950,000, as follows:

To the North Missouri.....	\$750,000
To the Pacific, Southwest Branch.....	500,000
To the Platte Country.....	700,000

Total.....\$1,950,000

These last, with the exception of the grant to the Platte Country Road, are to be issued upon condition that no sale is made of them at less than 90 cents on the dollar. Adding these to what has been issued and the amount authorized to be issued, the aggregate will be \$19,206,000. The amount, authorized to be issued at the discretion of the Governor, was granted in the belief that, by the expenditure of that amount, the roads benefitting by it could be carried to points, the extension to which not only promised to yield greatly more than the interest of the new debt, but was deemed absolutely necessary, for obtaining anything approaching to the full advantage, that ought to be expected from the outlay already made. Thus, for example, in the case of the Iron Mountain Road, the expenditure of the additional sum was necessary, it was thought, in order that the road should be of any value. It may be said that the expenditure of that sum makes all the difference between a road complete and no road at all. As the engineer of the Iron Mountain Road remarked in his report:

"The accruing interest on the outstanding bonds, if the road be suffered to stop for six months, would be more than sufficient to put the road in a safe condition for being worked so as to earn a much greater sum than this interest. There exists, therefore, in our case, the seeming paradox, that it will cost us more to stop work, than to go on with it to completion."

The sum further authorized to be expended, on condition that the bonds are not sold under 90 cents, will, it is supposed, complete the



North Missouri to the Hannibal and St. Joseph Road, while it will give to the south-west branch a highly beneficial extension. The remaining sum authorized, to-wit: \$700,000 to the Platte Country Road, is to be expended, one half, when the road is finished from Weston to St. Joseph and the other half when it is completed to the State line north. Beyond the sum of \$19,206,000, no bonds are to be issued until March, 1859.

Of this \$19,206,000, it is not to be presumed that there will be any immediate issue beyond what the Governor may, at his discretion deliver to the Companies. That amount is, as we have stated, \$1,326,000. Add this to what has been already issued (\$15,930,000) and we have as the total which is likely to be issued for some time to come, seventeen millions two hundred and fifty-six thousand (\$17,256,000.) The interest on this amount at five per cent. is \$1,035,360. How much of this interest will be paid by the receipts of the roads when completed to what are familiarly called the "paying points," to carry them to which the additional issue has been authorized, is now, of course, only matter for conjecture. Mr. McPherson, the President of the Pacific road, says, in a recent communication to the Board of Public Works: "With the road open to Round Hill, and a line of packets permanently established in connection with the road to Jefferson City, no fear, in my opinion, need be entertained about the punctual payment of interest on the State bonds loaned the Company."

The Pacific has this year averaged, net, \$30,000 a month, or \$360,000 a year. The other roads are, three of them, great trunk roads, and the fourth communicates with a vastly rich mineral region. These roads ought not, when in operation to the extent to which they can be immediately carried, to do worse than the average of poorly paying roads in different sections of the country. We have had the curiosity to examine the reports of seven of those roads, selected east, west and south, and find that in 1856,—a bad railroad year,—their net earnings over running, repair and renovation expenses, were \$1,500 a mile. The same year, the Reading Railroad, with which the Iron Mountain has some characteristics in common, netted over thirteen thousand dollars a mile. We are not overstating it, then, if we estimate the net receipts of these four roads, in operation as supposed, to be \$1,500 a mile.

The North Missouri is 105 miles long to New Mexico, to which it will be carried by the expenditure of the further sum unconditionally granted to it. At \$1,500 a mile, its net receipts would be \$157,500.

The Iron Mountain is 78 miles long. Net earnings calculated at \$117,000.

Of the Hannibal and St. Joseph Road, about 100 miles will soon be completed. Of this road, it is understood that ample provision has been made for some years to pay the interest on the bonds issued to it. But supposing it has for that purpose only its earnings at the rate calculated, and it will have \$150,000 to meet interest with.

The Southwest Branch, 20 miles—as far as the present point of stopping—may be expected to pay \$20,000. The Cairo and Fulton is amply endowed and has means, we understand, to pay its interest on the small sum issued to it. We, however, leave it entirely out of the calculation.

The recapitulations of the foregoing will show as follows:

#### INTEREST TO BE PAID.

Total on bonds now or to be immediately issued..... \$1,035,360

#### INTEREST PAID BY RECEIPTS OF ROADS.

By Pacific, Main..... \$360,000  
By Pacific, Southwest Branch..... 20,000  
By North Missouri..... 157,000  
By Iron Mountain..... 117,000  
By Hannibal and St. Joseph..... 150,000

\$804,000

Interest for which the State is liable..... \$1,035,360  
Of which it is expected the Roads will pay... 804,000

Leaving to be paid by the State..... \$231,360

The "Revenue," or Receipts into the State Treasury from taxes, licenses, &c., was last year \$605,000. It is supposed that under the new revenue law it cannot be hereafter any less. Out of this, one quarter is appropriated to support of Schools; and of it, \$250,000 is considered by the State Auditor to be enough to allow for the support of government. Both these items of expenditure would amount to \$401,000. Deduct this from the Revenue and the remainder is \$204,000. We should then have:

Interest to be paid by State..... \$231,360  
In the Treasury applicable to it..... 204,000

Deficit..... \$27,360

But besides the revenue, there is an appropriation to meet interest of all that may be realized from the General Government, or what is due on account of public land sales in Missouri. This is computed at several hundred thousand dollars. There is also a power to draw on certain special funds; and, if necessary, there will be levied a special mill tax, expressly to pay interest. The proceeds of this tax,—the State valuation being \$260,000,000,—would be \$260,000.

We do not know that a fairer statement could be made of the prospects of the payment of the interest on the State debts, in the future. As to the January and July payments, we are satisfied that arrangements can be, and as we doubt not they will be, made to pay the interest. But if our statement is a miscalculation in any material point, we think it does not, in any event, so underrate the ability of the roads to pay, as to make their default not easily remedied by the levy of the mill tax and drafts on special funds, which have not yet been authorized to be touched for payment of interest.

#### MICHIGAN CENTRAL RAILROAD.

MICHIGAN CENTRAL R. R. Co. }

Treas. Office, Boston, Jan'y 4th 1858 }

Certain misapprehensions seem to exist with some of the press and their correspondents regarding the position of this Company.

Our loan has been paid for quite as fast as was agreed, but in conformity with its conditions, chiefly in bonds and notes of the Company, which were receivable therefor, as will be seen by our advertisement herewith.

This, and a moderate falling off in our earnings below the estimate of September last, has rendered it impossible to provide for our engagements as fast as they mature.

The inconvenience to our creditors is much regretted, and it is hoped that the sacrifices made in order to meet our obligations will generally prove satisfactory.

For such maturing bonds as we have not the means of paying, the Board have authorized the issue of short bonds to be exchanged, drawing eight per cent. interest, according to the laws of Michigan.

#### Extract from Circular of October 1, 1857:

Sealed proposals will be received at this office up to 10th of November, at 1 o'clock P. M., for a loan of \$1,000,000, payable as follows:

- 10 Ten per cent. on November 14th, which first instalment the Company will retain, without issuing bonds therefor until the first instalment is paid.
- 15 Fifteen per cent. January 1, 1858.
- 25 Twenty-five per cent. March 1, 1858.
- 25 Twenty-five per cent. May 1, 1858.
- 25 Twenty-five per cent. July 1, 1858.

100

—For which the Company will issue Eight per cent. convertible bonds with semi-annual Coupons dated 1st October, 1857, and having twenty-five years to run.

Notes of this Company or Bonds maturing between this date and July, 1858, will be received in payment of this loan, with proper adjustment of interest.

ISAAC LIVERMORE, Treasurer.

#### NEW YORK STATE CANALS.

The following is from the Annual Message of the Governor of this State to the Legislature:

The net tolls of the past year, extending from 1st October, 1856, to 1st October, 1857, fall short, as appears by the annexed abstract from the report, to me, of the Auditor of the Canal Department, by \$110,984 40 of the sum of \$1,700,000 required by the constitution to be annually set apart from the surplus revenues of the canals, as a sinking fund for the redemption of the canal debt, as it existed in 1846. The constitution further requires that \$350,000 be annually set apart from the surplus funds to provide for the interest and principal of the General Fund Debt. This also is deficient, thus making the whole deficit of the tolls to satisfy the requirements under 1st and 2d sections of article 7 of the constitution, \$460,984.

The work of enlargement has, it is believed, been advantageously and steadily prosecuted during the past year, though I am unable to furnish you with any details. These will be presented to you in the report which the State Engineer is preparing, and will make the Legislature at an early day. Assuming, however, as accurate, the estimates in his annual report, of the cost of completing the enlargement, from

1st December 1853, at..... \$14,250,000  
And giving credit for the sums since appropriated thereto, viz., amount of four loans of \$2,250,000 each, under Constitutional Amendment of 1854..... \$9,000,000  
Premium thereon, and interest on premium..... 1,400,000  
Proceeds of Mill Tax, per law of 1857..... 1,350,000

11,750,000

Leaving deficit..... \$2,500,000

To meet this there is only the loan of \$500,000, authorized by the last Legislature, not yet negotiated. It will devolve upon you, therefore, to provide the additional means. I have already suggested that tolls on competing railroads be restored, and would further suggest, as an additional resource, such increase of canal tolls as may be found expedient, and for the balance we can only look to direct taxation; and accordingly I recommend that recourse be had thereto, in such measure and with such apportionment of the burthen over two years, as will render it less



onerous to the people, while fulfilling the end proposed, of ensuring the speedy enlargement. That result, if adequate means were on hand, might be accomplished within the current year. But inasmuch as no such means can be provided within that time, we must be content to wait a little longer for this great consummation, well assured that when it does come, it will come crowned with abundant and lasting prosperity. Meantime it may be safely estimated that, with the tolls on competing railroads, and a tax of one half mill annually, for two years, a sufficient sum will be raised to effect the desired object, and thus at the commencement of the year 1860, put the State in possession of this great property, with a sinking fund adequate to the rapid extinction of all the debts charged upon it, and with an income that will thenceforth obviate the necessity of taxing the people.

### TONNAGE TOLLS.

The policy of the States of New York and Pennsylvania with regard to State tolls on tonnage passing through them, will be sufficiently apparent from the Annual Messages of their respective Governors.

#### NEW YORK.

The Canal Revenues are again deficient, and it becomes a duty to express the opinion that under existing circumstances, the Legislature may, with equal fitness and justice, repeal the law of 10th July, 1851, "Entitled an act to abolish tolls on Railroads," and then, by a further act, re-establish the tolls on competing Railroads, which had been pledged, by the Constitution, as part of the Canal revenues, for the security and ultimate redemption of the public debt.

#### PENNSYLVANIA.

The law incorporating the Pennsylvania Railroad Co. imposed a tax of three mills per ton, per mile, on all tonnage passing over the road, as an equivalent for any decrease in the revenues of the Commonwealth that might arise from the anticipated competition of the road, with the business of the Main Line of the public improvements. This tax is not imposed upon the company, but upon the tonnage, and is paid by the owners of the freight transported over the road; the company acting as agents in its collection and payment to the State. It is virtually a tax upon the trade and commerce of the Commonwealth, and upon the commerce of other States whose productions seek an eastern market over this road; and thus by increasing the rate of charges and the cost of transportation the produce of the west is forced upon the competing railroads of other states and to other markets than our own. The necessity that required this tax, as regards the Commonwealth and her improvements, has ceased. Its continuance can only be justified as a revenue measure. It should be the policy of the State to invite the transmission of the products of other States through her territory to her own markets, and, therefore, the propriety of relieving the trade and business of the Commonwealth and country from this tax upon it, is respectfully submitted for your consideration.

### HANNIBAL AND ST. JOSEPH, AND IRON MOUNTAIN RAILROADS.

The following was among the acts passed by the Legislature of Missouri at its recent session:—

AN ACT concerning the Lands of the Hannibal and St. Joseph and Iron Mountain Railroad Companies.

Be it enacted by the General Assembly of the State of Missouri as follows:

SEC. 1. It shall be the duty of the land

agents of the Hannibal and St. Joseph Railroad and Iron Mountain Railroad Company, within six months after the passage of this act, to make a separate descriptive list of all lands granted to said companies by the State of Missouri by the act approved September 20, 1852, (as the same have been certified by the Commissioner of the General Land Office, and approved by the Secretary of the Interior,) for each county through which the line of their road passes, or in which any of said lands are located, designating the same by their legal subdivisions, and to cause the same to be attested by the Secretary of the said company, under his official seal, and to file the same for record in the office of the Recorder of Deeds in each of said counties.

SEC. 2. Said record may be offered in evidence in any suit for trespass on said lands, or in any case in which the title to any of said lands may be in question by the Hannibal and St. Joseph Railroad Company, said Iron Mountain Railroad Company, or any person claiming under them, and shall be received in any court as *prima facie* evidence of the Company's title to the same; *provided*, that such record shall not be used as evidence in favor of said company on the trial of any suit for trespass committed before the passage of this act.

SEC. 3. This act shall not impair or affect the right or title of any individual, county, or the State, to any of the lands referred to in this act.

This act to take effect and be in force from and after its passage.

Approved November 23, 1857.

### BUSINESS OF THE BALTIMORE AND OHIO RAILROAD.

The regular monthly meeting of the Board of Directors of the Baltimore and Ohio Railroad took place yesterday. The following statement, showing the business of the road for the month of December, was presented.

Bark, 70 tons; coal, 23,128 tons; fire-brick, 19 tons; fire-wood, 35 tons; flour, 118,805½ bbls; grain, 839 tons; granite, 572 tons; iron, 592 tons; iron ore and manganese, 386 tons; lard and butter, 656 tons; leather 160 tons; cotton 136 bales; wool, 32 bales; flaxseed, 13 casks; lard oil, 21 tons; lumber, 159 tons; lime, 8 tons; live stock—hogs, 29,103 head; sheep, 901 head; horses and mules, 130 head; horned cattle, 872 head; meal and shorts, 209 tons; pork and Bacon, 2,179 tons; tobacco, 303 hds.; whiskey, 9,718 bbls.; miscellaneous, 814 tons; hay, 38 tons; flour from Washington Branch, 1,154 bbls.

The revenue for the month has been as follows:

	Main Stem.	Wash'n Branch.	Total for both roads
For Passengers,	\$52,510.83	\$26,743.57	\$79,254.40
For Freight....	231,047.13	10,841.89	391,889.02
	\$343,557.96	\$37,585.46	\$381,143.42

The following is a statement of the receipts of the past month as compared with those of the corresponding month of last year:

	Main Stem.	Wash. Branch.	Total.
Dec., 1856.....	\$431,656.68	\$34,447.19	\$466,103.77
Dec., 1857.....	343,559.96	37,585.46	381,143.42

[Decrease, \$87,998.62 Inc. \$3,138.27 Dec. \$84,960.35

There has been a falling off during the past month of \$88,098.62 in the receipts of the main stem, and an increase of \$3,138.21, in those of the Washington Branch, as compared with the receipts of the same month last year—making an actual decrease in the

revenue of \$84,960.35. Among the articles brought into Baltimore over the road during the month is 119,959 barrels of flour, by far the largest receipt of the article yet reached.

### PENNSYLVANIA RAILROAD.

The annexed statement shows the freight business of the road, (in tons) for the month of December, 1857, compared with the corresponding month in 1856, 1855, 1854, and 1853:

	1857.	1856.	1855.	1854.	1853.
Freight East.....	30,382	26,433	29,999	12,817	11,964
"    West.....	10,468	13,059	11,625	9,187	6,330

The following exhibits the aggregate of each article, sent from and received at the Philadelphia depot during the month of December, in pounds:

	Rec'd at Philad.	Sent from Philad.
Agricultural Implements.....	3,250	16,460
do. Productions.....	149,735	35,958
Boots, Shoes, Hats, &c.....	.....	90,720
Books and Stationary.....	7,190	91,827
Butter and Eggs.....	573,497	.....
Brown Sheetings and Bagging.....	.....	121,044
Bark and Sumac.....	164,227	.....
Cedarware.....	3,913	10,684
Confectionary and Foreign Fruits.....	.....	177,602
Coffee.....	.....	663,699
Cotton.....	217,010	22,420
Coal, Anthracite.....	.....	2,221,555
do. Bituminous.....	17,897,755	.....
Copper, Tin and Lead.....	.....	66,198
Dry Goods.....	77,299	1,009,845
Drugs, Medicines and Dye Stuffs.....	33,199	337,397
Fresh Meats, Poultry and Fish.....	589,919	.....
Flour.....	16,883,939	41,676
Feathers, Furs and Skins.....	8,119	1,100
Furniture and Oil Cloth.....	37,120	123,658
Glasses and Glassware.....	41,940	63,706
Green and Dried Fruits.....	964,424	.....
Grass and Other Seeds.....	145,059	4,480
Grain of all kinds.....	8,795,320	21,680
Groceries (except Coffee).....	20,328	2,045,472
Gunseug.....	20,846	.....
Hardware.....	78,233	354,381
Hides and Hair.....	203,575	107,327
Hemp and Cordage.....	65,315	64,265
Iron—rolled, hammered, &c.....	780,150	194,473
Iron—Blooms and Pig.....	49,792	38,500
Iron—Railroad.....	.....	42,464
Live Stock.....	5,622,000	11,900
Leather.....	322,160	266,622
Lime and Plaster.....	.....	170,083
Lard, Lard Oil and Tallow.....	608,923	.....
Lumber and Timber.....	3,305,675	51,790
Machinery and Castings.....	56,485	531,395
Marble and Cement.....	.....	296,006
Malt and Malt Liquors.....	136,791	44,319
Nails and Spikes.....	65,114	47,661
Nickel Metal.....	102,100	.....
Oil.....	.....	237,251
Oysters.....	.....	94,765
Paper and Rags.....	47,722	108,412
Hot, Pearl and Soda Ash.....	19,147	691,829
Queensware.....	.....	142,870
Salt.....	.....	941,234
Salt Meats and Fish.....	1,627,420	236,645
Soap and Candles.....	33,823	692
Tobacco.....	8,771	19,981
Tar, Pitch and Rosin.....	.....	96,599
Wines and Liquors—Foreign.....	.....	191,550
Whiskey and Alcohol.....	2,992,665	73,349
Wool and Woolen Yarn.....	47,123	6,200
Miscellaneous.....	24,151	47,002
Straw Boards.....	35,450	.....

Total during Nov., (pounds).....62,077,554 12,490,413

### CLEVELAND AND CHATTANOOGA RAILROAD.

We learn from the Chattanooga Advertiser, that this road is rapidly progressing to completion. The line is 30 miles in length. 20 miles of which is now ready for the iron, and the heaviest part of the masonry and bridge work is in a finishing state.—The iron for the greater distance of the road is on the ground and ready for laying, and would be put down if the company could command the necessary complement of cross-ties. The hard times has had no effect upon the company—instead of stopping work they have put on more hand. Under the management of its energetic President, the road is in a condition to be put through all finished and cars running in twelve months.



## MONETARY AND COMMERCIAL.

The past week has been one of comparative ease in the money markets. Inquiry for discounts is considerably abated, and we begin to hear of capital seeking investment at the high rates of interest that have prevailed during the panic. The regular houses are doing more for their customers at their rates, 10 to 12 per cent. per annum. This, with the diminished demand, relieves the street, and renders it more difficult for the street brokers to exact the enormous tariff they have hitherto been charging. Should the contraction continue many months longer, money will be decidedly cheap.

There is a better supply of currency than at our previous dates. Collections are somewhat easier, but are still very difficult. In the present condition of our merchants, however, a very little help from their customers will produce a very satisfactory state of things in the city.

The bank news for the week do not exhibit any material change. The banks of Pennsylvania and Missouri have not yet made a movement toward the resumption of specie payments. Though those of the former State are supposed to be nearer to it than those of the latter. Many of the banks of Pennsylvania have an ample specie basis to resume at any moment, while others have but one-tenth specie to their circulation. These latter should be weeded out, and better institutions put in their place.

The pork season is drawing toward its close. The number packed throughout the west this year has been above the average. There is also a decided increase in weight.

We quote Eastern Exchange at  $\frac{1}{4}$  to 1 per cent. premium on New York and Boston, and  $\frac{1}{4}$  to  $\frac{1}{2}$  premium on Philadelphia. Baltimore Exchange is  $\frac{1}{4}$  dis. to  $\frac{1}{4}$  prem. New Orleans is par to 1 prem. Gold stands at  $\frac{1}{4}$  to  $\frac{1}{2}$  to 1 prem.

In New York we notice an encouraging state of affairs. The European news indicates a tendency toward a still further reduction in the rate of interest by the bank of England. Stocks were becoming quite active and at increased prices. The tendency in the stock market, however, was to prefer State securities.

In the dry goods markets we notice a material reduction of prices from last years cost, amounting in some varieties to full 25 per cent. The importations are much below those of last year, but still heavier than they should be.

## SALES AT THE NEW YORK STOCK BOARD—Jan. 16.

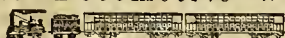
\$1,000 U. S. 6's, '67	113
6,000 Virginia 6's	92 $\frac{1}{2}$
500 Cal. 7's, '70	70
17,000 Misso. 6's	84 $\frac{1}{2}$
7,000 N. Y. State 6's, '73	111
7,000 Michigan 8's	81 $\frac{1}{2}$
22,000 Illinois Central R. R. Bonds	88 $\frac{1}{2}$
600 shares New York Central	78 $\frac{1}{2}$
300 " Cleveland & Toledo	42
100 " Erie R. R.	20
100 " Hud. River R. R.	18 $\frac{1}{2}$
157 " Harlem R. R. stock	6 $\frac{1}{2}$
300 " Reading	55 $\frac{1}{2}$
35 " Mich. Cent.	55 $\frac{1}{2}$
35 " Mich. S. & N. Ind.	20
50 " Panama	90 $\frac{1}{2}$
23 " Clev. & Pitts.	10
5 " Clev., Col. & Cin. R. R.	95
39 " Chicago & Rock Island	69 $\frac{1}{2}$
25 " Galena & Chicago	72 $\frac{1}{2}$

NEW YORK CENTRAL R. R. Co.—The following is a statement of the earnings of the N. Y. Central R. R. for the month of Dec., 1857, as compared with those of 1856:

Year.	Earnings.
1857	\$652,299 17
1856	687,576 71

Decrease ..... \$35,277 54

## Norris' Locomotive Works.



## PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY. Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. J. R. 27.

RICHARD NORRIS & SON.

IRON BOILER FLUES  
PASCAL IRON WORKS.

## MORRIS, TASKER &amp; CO.,

Manufacturers of

## LAP-WELDED BOILER FLUES,

1  $\frac{1}{2}$  to 7 inches outside diameter, cut to definite length as required.

## WROUGHT IRON WELDED TUBES,

From  $\frac{1}{2}$  to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,  
PHILADELPHIA. Aug

## RAILROAD IRON.

## LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m. J. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## Reliable Books for Travelers.

## DINSMORE'S

## R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains Official Time Tables with References; Combined Railroad Routes; Steam Navigation; Gazetteer. Price 25 cents, with Large Map

DINSMORE'S THIRTY MILES AROUND N. YORK, By Railroad, Steamboat, Stage, Express and Telegraph; or how to get in and out of the Metropolis. An alphabetical list of 1000 places. Price 12 cents.

## TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hopkin. Part First now ready, with spicy articles on Peter Funk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents. DINSMORE & CO.,  
9 Spruce street, New York

## INDIANAPOLIS,

## Terre Haute, Lafayette, Chicago,

## AND THE NORTH-WEST.



## INDIANAPOLIS AND CINCINNATI

## SHORT LINE RAILROAD

## VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

## THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

## FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

## SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

## THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Keosauha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

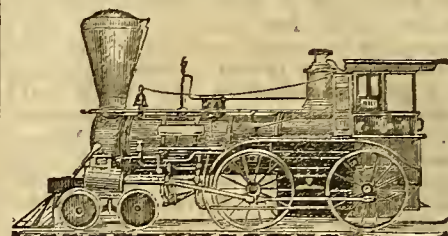
Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

## VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M. H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

CINCINNATI  
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

## Railroad Car Findings

## BRIDGES &amp; BROTHER,

64 Courtlandt Street, New York.

Wheels & Axles, Jaws Boxes, and Casting Fitted Wrought Nuts, Bolts, & Washers,

Engine and Car Screw Bolts, all sizes; Coach Lag and Telegraph Screws,

## LOCOMOTIVE ENGINE LANTERNS.

From the best Manufacturers, and at their prices. Can Hand, and Signal Lanterns.

## Cotton Duck for Cr Covering,

Of any required width to 124 inches.

## ENAMELLED HEAD LININGS

## Plush and Curled Hair.

Hand Cars and Baggage Barrows. Passenger, Freight Car, and Switch Locks, Door Knobs and Butts. Brass and Iron Wood Screws. Brass and Silver plated Trimings for windows and Seats. Varnish, Coach Japan and Glue; Paints, Varnish and Glue Brushes.

Silver Plated and White Metal Letters. Engine and Signal Bells, anti-friction or Babbitt Metal.

## Portable Forges and Jack Screws.

Hemp Packing, American, Russian, and Italian. Conductors' Badges and Baggage Checks. Iron, Bronze and Brass Hat Hooks. Ventilators and White Metal Rings. And all other articles pertaining to Cars.

## ALBERT BRIDGES,

Late Davenport & Bridges, Car Manufacturers, Cambridgeport, Mass.

## ALFRED BRIDGES,

Late Davenport, Bridges & Co. Fitchburg, Mass. 1006.

## GEO. D. WINCHELL &amp; BRO.,

172 Elm Street, bet. 4th and 5th,

## CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

## SUCTION &amp; FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

MEAS L. (The highest prize) awarded to the McGowan's Pumping Engine at the late da Ohio Mechanics' Institute. June 18, 1855 F1



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int.	When Payable.	Where Payable.	When Due.	Description of Bond.	Qu'ty of Bonds.	Name of Company.	Qu'ty of Stock.	Qu'ty of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	173	Albany, Litchfield & Hmpsr		173	6,000,000.00		209,475.46	170,246.98	none.
498,800	7			1862-3	2d "	54.55	Androscoggin & Kennebec		54.55	1,400,000.00		254,123.74	173,580.74	4 pr. ct. 6m
199,000	6	July & Jan.		now	Domestic.	86.5	Atlanta and LaGrange.		86.5	1,000,000.00	199,000.00	254,123.74	173,580.74	8 pr. ct.
52,646	6			1860	"	12.5	B'g'r, Old T. & Milford.		12.5	135,000.00	52,646.26	39,104.40	8,671.61	15,000 in '53
500,000	7			1866	1st mortgage.	44 5 8	Boston & Worcester.		44 5 8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4 6m
300,000	7		N. Y.	1857-9 62	Income.		Buffalo & State Line.			1,300,000.00				5 pr. ct. 6m.
200,000	7			1864	Domestic.		"							
577,187	6			1872	4th mortgage.	43	Central Ohio.		43	1,872,000.00	1,001,087.00	168,200.00	77,760.00	10 pr. ct.
192,266	7			1874	1st mortgage.		Champlin & St. Lawrence							
360,000	7				2d "	110	Ch'r'l's & South Carolina.		110	1,700,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
1,440,000	7				1st mortgage.	138	Ch'go, Burl'g'n & Quincy.		138	3,746,000.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
1,300,000	6-7-8		N. Y.		2d "		"							
374,000	8				Convertible.		"							
1,300,000					1st mortgage.		Chicago, Fulton & Iowa.							
532,000					2d "	131	Cin. W'ling'n & Zanesville		131	1,761,149.16	2,241,500.00	221,491.96		
104,000					3d "		"							
305,500					Income.		"							
540,000	6				Convertible.		Cleveland Col. & Cin.		139	4,741,220		1 3 754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	85	Cleveland & Mahoning.		85	1,500,000.00				
400,000				1864	2d "		"							
1,000,000	7			1873		52	Cumberland Valley.		52	1,218,300.00		160,511.56	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	52	Dayton & Cin. short line.		52	1,000,000.00	1,000,000.00			
						93 6 10	Eastern Railroad.		93 6 10	3,345,000.00		663,578.79	288,0-7.84	\$234,133
350,000	7				1st mortgage.	180	East Ten. & Virginia.		180	625,450.00		30,897.30	19,692.30	
740,000	10			1869	1st "	20	Essex Railroad.		20	700,000.00				
88,000	10			1861	2d "	109	Evansville & Crawf'd'vle		109	2,328,637.00		248,970.42	136,061.90	\$133,281.45
400,000	7			1864	1st mortgage.		The Fitchburg (Mass.) R.R.			3,540,000.00		681,162.52	213,837.81	3 per cent.
200,000	10					33	Fox River Valley.		33	800,000.00				
						15	Fair Haven Branch.		15	300,000.00		50,381.33	14,822.45	\$166,240.00
100,000	6				1st mortgage.	233	Georgia RR & Banking Co.		233	4,156,000.00		1,068,202.56	357,689.42	\$166,240.00
100,000	6				1st "	20	Grt Falls & Conway R.R.		20			27,376.69	14,207.07	
300,000	7			1858	1st "	281 1/2	Grt West'n R.R. of Can.		281 1/2	4,101,550.00		2,068,836.00		8 pr. ct.
4,000,000	6 1-9			1869-70	1st "	74	Housatonic Railroad.		74	2,000,000.00		339,196.50	176,529.93	
2,000,000	7			1860	2d "	144	Hudson River.		144	4,000,000.00		1,924,322.44	718,037.40	
1,812,000	7			1875	3d mortgage.	144	"		144	4,000,000.00				
12,885,000	7			1875	1st "	704	Illinois Central R. R.		704	18,453,376.00		1,476,035.27	1031,499.08	7 pr. ct.
4,115,000	6			1876		704	"		704	3,558,376.00				
3,000,000	7			1860	Freeland.		Indiana Central.		72 1/2			354,871.00		3 pr. ct.
600,000	7				1st mortgage.		"							
700,000	7	Nov. 1.			2d "		"							
50,000	7	Jan. & July 1			3d "		"							
700,000	7			1862	1st mortgage.		"							
						13	Iron R. R.		13	123,700.00				
							Kentucky Cen. 2d Div.			719,500.00				
						32	Knoxville & Kentucky.		32	166,000.00		23,233.59	14,233.59	
						184	Laurens (S. C.) R. R.		184					
						12 35	Louisville & Nashville.		12 35	300,000.00		50,234.71	14,149.13	\$8,000
218,000	7				1st "		Lowell & Lawrence.			2,697,090.00		587,236.57		10 pr. ct
1,000,000	7			1866	2d "		Mad River & Lake Erie.			2,697,090.00			162,277.50	
1,000,000	7			1875	3d "		"			2,697,090.00				
2,000,000	6				1st "	26	Manchester & Lawrence.		26	1,000,000.00				\$24,000
2,500,000	7			1868	1st "		Marietta & Cincinnati.							
2,000,000	7			1874	2d "		"							
60,000	7 and 8			1867	1st "	27	Mexican Gulf R. R.		27					
420,000	8				1st mortgage.	30	Milwaukee & Horicon.		30					
320,000	8			1881	1st "	32	Mineral Point R. R.		32					
320,000	8			1-68	2d "	32	"		32					
6,000,000	6			1884	1st "	497	Mobile & Ohio.		497	10,000,000.00		253,498.96	102,802.24	
						15	Nashua & Lowell R. R.		15	600,000.00		19,1752.42	55,501.74	7 pr. ct.
500,000	7			1869	1st mortgage.	55	New Haven & North'n		55	925,500.00				2 pr. ct. 6m
8,356,000	6	May & Nov.	N. York			553	New York Central.		553	23,067,400	14,763,807	7,707,348	3,609,481	3 pr. ct. 6m
32,892,600	7	June & Dec.	N. York	1864	Con. till 1859.		"							
000,000	7			1873	1st mortgage.	173	N. Y. & Harlem R. R.		173	5,717,100.00		1,040,293.26		
936,000	7			1864	2d "		"							
411,700	6			1863	1st "	50	N. Y. Prov. & Boston.		50	1,58,000.00		245,713.00	51,544.40	
500,000	7				1st "	66	N. Lon. W'lim'ntu & Pal.		66	1,700,000.00		120,571.50		
300,000	6				2d "		"							\$25,000
						5	Pontchartrain R. R.		5	600,000.00				
							N. O. Opelous & Gr. West.			6,000,000.00		116,795.00	366,118.80	7 pr. ct.
1,500,000	6			1873	1st mortgage.	62 1/2	N. Y. & New Haven.		62 1/2	3,000,000.00		1,007,666.48		
1,000,000	6			1873	2d "	103 1/2	North Western Va. R. R.		103 1/2					
2,000,000	7			1-85	3d "		"							
1,500,000	6			1859	1st mortgage.	118	Northern (N. Y.) R. R.		118	2,000,000.00		600,000.00		7 pr. ct.
3,000,000	5					19 2	North Missouri R. R.		19 2			25,176.74	88,458.56	2 1/2 pr. ct.
419,300	7			1877		60	Norwich & Worcester RR		60	2,111,500.00		304,236.33		
221,800	6			1860			"							
						94	Ogd'sb'g, Clay'tn & Rome		94			289,690.10	137,875.93	5 pr. ct.
400,000	6			1866	1st mortgage.	88 3	Ontario, Simcoe & Huron		88 3	2,957,500.00		276,539.02		
1,200,000	7			1875	2d mortgage.		Orange & Alexandria R.R.							
300,000	6			1-68	1st mortgage.	47	Pootia & Bureau Val. R. R.		47	1,500,000.00				6 pr. ct.
300,000	8			1872	1st "		"							
						28 1-5	Philadelphia & Trenton.		28 1-5	1,000,000.00				
350,000	7			1861	1st mortgage.	47	Portsmouth & Concord.		47					
800,000	6			1864 to 1874	1st "	76	Potsdam & Watertown.		76	2,000,000.00				
				20 years.		62 1/2	Rutland & Washington.		62 1/2	950,000.00		68,525.42		
1,260,000	6				1st mortgage.	86	St. Louis & Iron Moun. R.R.		86	6,000,000.00				
						16882	Salem & St. Louis R. R.		16882	400,000.00				
						116	Snd'sky, Mansf'd & Newk		116				19,050.64	
500,000	6				1st mortgage.	26	Sullivan Railroad.		26	500,000.00		75,246.06		
250,000	6				2d "		"						17,378.08	
						145	Tennessee & Alabama.		145			39,566.44		11m. 12 pr. ct
1317,000					1st mortgage.	73	Terre Haute & Richmond		73	1,291,450.00				
						212	Toledo, Wabash & Western		212					
300,000				1861	1st mortgage.		Troy & Boston.			1,000,000.00				
198,000				1840	2d "		"							
262,500				1875	3d "		"							
						46	Vicksburg & Jackson.		46				165,076.04	
2,500,000					1st, 2d, 3d "	215	Virginia & Tennessee.		215	3,000,000.00		322,048.60		2 pr. ct.
						31	Westchester (Pa.) R. R.		31	165,000.00				
590,000	7				1st mortgage.	171	Wilmington & Manchester		171					
200,000	7				2d "		"							
						32	Winchester & Potomac.		32					
						45 69	Worcester & Nashua.		45 69					



# GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,

NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

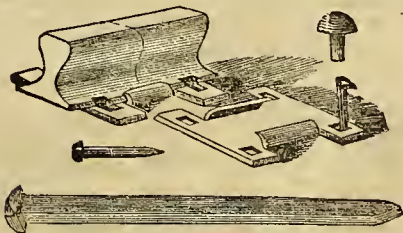
## RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.

### GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.  
Please direct name in full.  
CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4:45 A. M., 1:55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.  
Office, 31 Main Street, west side, 5 doors north Madison House.  
Cincinnati, Jan. 31, 1855. [Jan-15] Agent.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, O.

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—  
JAMES H. MORLEY, New York City.  
Or SUMNER SMALL, Boston, Mass.

F. W. RHINELANDER.  
JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,  
RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLIET, Jr., Civil Engineer.  
No. 288 H Street, Washington, D. C.

### W. G. HYNDMAN'S



### Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for building of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forges made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address  
W. G. HYNDMAN,  
ap23 41 East Second street, Cincinnati, O.

THOMAS D. STETSON,

Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out Inventions.

oc23

### RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1600 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-1f 10 Wall St., near Broadway, New York.

### ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857. jy23-1m

### D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,  
Respectfully Yours,

D. M. CARHART,  
oc129-6m Box 1831, Cleveland, Ohio.

### T. F. RANDOLPH & BRO. Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street. P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

W. M. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

Julio Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK, Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1857.

November 30.

1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA

## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Columbus accommodation, leaves Cincinnati at 4:30 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office south-east corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

'an2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE &amp; CO.,

Jan 8 ly 119 Walnut st., Odd Fellows' Building

1857.

Summer Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, PHILADELPHIA, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPORT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day. WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPORT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia, arriving at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS TRAIN** on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL PLACES AS LOW AS BY ANY OTHER ROUTE.**

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:30 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

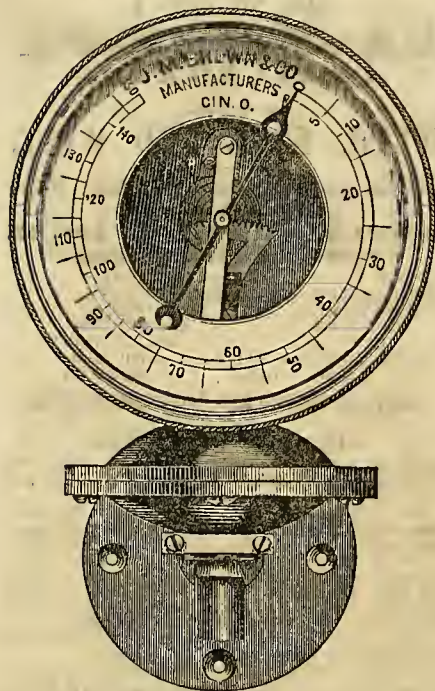
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to

DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafts, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

### MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

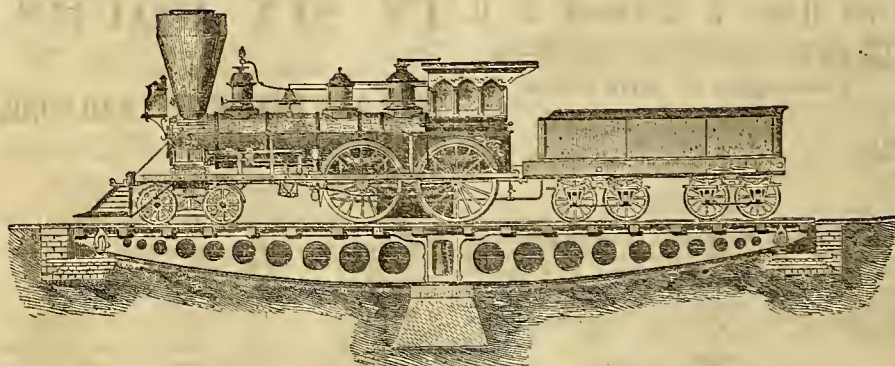
N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## William Sellers & Co.

—LATE—

BANCROFT &amp; SELLERS,



16th Street and Pennsylvania Avenue, Philadelphia,

MANUFACTURE RAILWAY, TURNING AND SLIDING TABLES, and PIVOT BRIDGES, upon a new and economical plan and of any required length. The Turning Tables and Pivot Bridges are fitted with Parry's Anti-Friction Box—thus enabling one man without the intervention of gearing to turn the largest table when loaded with Engine and Tender. Being of iron they are not liable to get out of order, and water within 18 inches of the track, will not impair their efficiency or durability.

ALSO:

BANCROFT'S PATENT SELF-ADJUSTING HANGER and PILLOW BLOCK BEARINGS suitable for all kinds of Shafting or Mill gearing. A large supply of this article kept constantly on hand, arranged so as to attach to upright posts, suspended to the under side of beams, to rest upon foundations, or adapted especially to counter-shafts for tools, or other machinery. Cast Iron Grind Stone Boxes, fitted with this bearing and resting on wheels for convenience of moving, also kept constantly on hand. Having probably the largest stock of Pulley Patterns, in the country, they are prepared to furnish castings or finished pulleys at short notice, as, also, shafting, couplings, gear wheels, &c., suitable for all manufacturing purposes fitted up ready for use.

They also continue the manufacture of their well-known class of *Engineers and Machinists' Tools*; such as Horizontal Planing machines, Vertical Planing machines, Lathes, Boring and Turning Mills, Boring Mills, Horizontal drills, Vertical drills Bolt Cutting machines, &c.

WILLIAM SELLERS.

JOHN SELLERS, jr.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JANUARY 28, 1858.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 49.

#### EDITORIAL.

Covington and Lexington Railroad—Exhibition of  
its Affairs—Eighth Annual Report.....721  
New York and Erie R. R.....722

#### RAILROADS.

Pittsburgh and Connellsville R. R.....722  
Philadelphia, Wilmington and Baltimore R. R.....723  
Pacific Railroad Bill.....724  
Cleveland and Mahoning R. R.....725  
Lehigh Valley R. R.....726

#### MISCELLANEOUS

Production of Steel.....726  
Tennessee Debt and Finances.....727  
Pennsylvania R. R.....727

#### MONEY AND STOCKS.

Monetary.....728  
Cincinnati Stock Sales.....728

**CINCINNATI DIRECTORY.**—This annual visitor has again been laid on our table by the enterprising publisher, Mr. C. S. WILLIAMS. Our citizens are much more indebted to him than most of them are willing to acknowledge, for this indispensable compendium of a great city. We trust that as every citizen receives a direct benefit from this work, and more especially our business men, that they will extend to him a more liberal support than hitherto, thus enabling him to add further improvements in the utility and a wider-spread gratuitous distribution of the work through Western towns and villages. It is printed on new type, and in a superior style to any similar work in the United States.

**MAP OF THE BOUNDARY BETWEEN THE UNITED STATES AND MEXICO.**—We are indebted to Moses Kelly, Esq., of the Department of the Interior, for a copy of the new Map of the Boundary between the United States and Mexico. It is beautifully executed, and its principal positions have been astronomically determined by the scientific gentlemen who have accompanied the various military expeditions into the new purchase of Arizona.

VOL. 5.—NO. 49.

### COVINGTON AND LEXINGTON RAILROAD—EXHIBITION OF ITS AFFAIRS—EIGHTH ANNUAL REPORT.

We have before us the Eighth Annual Report of the Covington and Lexington R. R. The directors deserve great credit for the character of this Report; although there are matters disclosed which deserve some censure. It is a frank, straight forward document, showing, in a good degree, *how* the money has gone, and *what* is its present business. In our notice of this road, made nearly two years since, we said that “it was not stated how much has been paid or allowed for discount on bonds or stocks.” That omission is now supplied. In that article, we stated that the sum of \$394,757 was unaccounted for. It will now be found in discounts and interest. The cost and sacrifices—for such they were—of this road, are thus stated:

Construction.....	\$2,641,269
Real Estate for use in Depots and Machine Shops.....	100,456
Machinery and Cars.....	271,584
Money Cost.....	\$3,013,309

This is the actual *money cost* of the Covington and Lexington Railroad; but the cost on the *books of the Company* is \$4,091,603. In other words, the *discounts and interest* on this Road amounts to \$1,078,293, *one million and seventy-eight thousand dollars*. This is 33 per cent on the actual amount of money used. It is a curious thing, and not without instruction, to observe how this discount was paid, and on what securities. We put the securities and *shaves* in parallel columns for this purpose.

		Discount.	Per cent.
1st Mortgage.....	\$ 420,000	\$ 38,111	9 per cent.
2d Mortgage.....	1,000,000	273,919	27 “
3d Mortgage.....	600,000	300,000	50 “
Covington Bonds.....	200,000	25,846	13 “
Cincinnati Bonds.....	100,000	9,031	9 “
Income Bonds at 10 per cent.....	400,000	103,623	26 “
Income 6 per cent....	210,000	47,005	23 “

It appears also, that the Fayette County, (Ky.) Bonds cost 15 per cent. to get off, or were sold at 85 cents on the dollar. A glance at this table shows that the *discounts* increased, just as the *security* diminished. The 3d Mortgage Bonds on which the greatest sacrifice was made, were really no security at all. Capitalists understood this. If a railroad has really to be sold out under a Mortgage, it would be next to a miracle if the 3d Mortgage got anything. But the holders of Income Bonds may get something from excess of income, when the road is not sold. On the whole an income Bond is better than a 3d Mortgage.

This little table is very instructive as a financial document. It shows that when a railroad is made, a candid calculation and estimate should be made of the entire cost to the last car; and that then, *all* the money which it is necessary to borrow should be put in one *mortgage*, and then one of two things would result, that the company would

either save a great sum, or the road would not be made. If the latter was the alternative, the fault would rest on the people, for whose benefit it was intended. The truth is, unless stock can be taken to half the probable cost of the road, it can hardly be expected that money holders will come forward to take the Bonds. It appears that the stock actually subscribed to the Covington & Lexington Road was about \$1,500,000. Suppose now, which is a reasonable estimate, that the *cash cost* of the road was estimated at \$3,000,000. Then, if the Directors had issued one set of Bonds for \$1,500,000, we have not the slightest doubt they would have been taken, at the least, at ten per cent., which would have cost \$150,000 to get \$1,350,000. The road actually paid \$611,000 for \$1,409,000—a trifle more. The Company really paid \$400,000 unnecessarily. But they are not alone in this, and may plead the *usage* of railroads. The business of the Company, we are happy to see, is increasing, and promises to be all its friends have hoped and anticipated.

In our former notice, we made a small estimate of the probable receipts of the road, which we compare with the results:

	Estimate.	Receipts.
In 1856.....	\$350,000	\$399,948
In 1857.....	450,000	426,408
	\$800,000	\$826,356

The aggregate *receipts* of these two years were \$26,356 beyond our estimate, and those of 1857 would have been, but for the extraordinary derangement of commercial affairs. We are no prophets; but, put the following down as an estimate of receipts for the two coming years:

In 1858.....	\$500,000
In 1859.....	550,000

If the Danville road was completed, the receipts would probably exceed this estimate. If the road should be completed to Knoxville, an object which every citizen of Kentucky should strive for—for every one would be benefitted—then the receipts of the Covington and Lexington Road *may* reach a *million* per annum. If it should, good financial management will make the *stock* of this road—much more its securities, among the best in the nation. To secure this desirable result, however, more zeal and energy, than is now exhibited, should be put forth. In less than a year, the whole financial and commercial world will move forward with elastic step. This country was never so rich; the world never so well prepared for great enterprises. *Now* is the time of preparation. Measures should be taken in Kentucky for completing the Central Line from Danville to the Tennessee Line. Probably the cost would not exceed *four millions*, and it would only be necessary to raise *two millions* in Kentucky to accomplish the result. One mortgage for



two or two and a half millions would be readily taken by money holders. Such a railroad connection, as that, can not be found in the world, and capitalists know that.

#### NEW YORK AND ERIE RAILROAD.

In the late Report of Mr. Moran, he criticises very severely the course of conduct pursued by the late *General Superintendent*, Mr. McCallum. To these criticisms, Mr. McCallum replies by an article as severely criticising Mr. Moran, and justifying his own course. The concluding paragraph of Mr. McCallum's article reads as follows:

Mr. Moran and some others seem to think that a railroad enterprise is to be made successful by skill in financial schemes, which, as used here, is but another expression for skill in getting into debt. This class consider that a company is successful and rich when its debts, however large, are funded and postponed. Wiser men know the success of all railroads must depend on the soundness of their *business policy*, and esteem them valuable by reason of their earnings rather than on account of their credit.

D. C. McCALLUM.

New York, Jan. 15, 1858.

We do not think that either of these gentlemen have much to boast of in their management of railroads. Mr. McCallum's inflexible rules were illy adapted to the government of reasoning and accountable beings. While Mr. Moran's exclusive attention to financial schemes promises to neglect altogether both rule and practice. Our advice to the directory of the Erie Railroad, if asked, would be to put some plain, practical experienced man in charge of the road as its superintendent, and not constantly annoy him with interference in trifles to the neglect of more important matters. And then if Mr. Moran must have his twenty-five thousand dollars salary, make him the financial agent of the company—the only position which he is fit to occupy, under any circumstances.

It may, however, be a consolation to some people to know, that *our advice* has never been asked in the matter, and, hence, we do not presume, plain men as we are, to impose it upon the eminent financiers and directors who have thus far managed the great *experiments* of this road.

MARIETTA AND CINCINNATI R. R.—This Company has called a meeting of its stockholders and creditors to convene at Chillicothe, Feb. 10, 1858, to consider and determine such course as shall be for the best interests of all concerned. We hope all that are interested will attend.

AMERICAN JOURNAL OF SCIENCE AND ART. This excellent scientific journal is published at New Haven, Conn., by Prof. Silliman and Dana, every two months. Each number contains 152 pages of reading, beside the illustrations. It is a most valuable work, and should be in the hands of every scientific man.

## Railroads.

#### PITTSBURG AND CONNELLSVILLE R. R.

We are indebted to B. H. Latrobe, Esq., President of the Pittsburgh and Connellsville Railroad Company, for a copy of its Fifth Annual Report. The unfavorable influences of the past year have been severely felt by the Company and the hopes that the officers entertained at its commencement greatly disappointed. The stock of the city of Baltimore has not been disposed of with the readiness and rapidity, and at the rates expected. The sale of the entire amount, before this time, was confidently looked for, and at not less than 95 per cent., but at the close of the fiscal year just expired, there had been but \$691,580 40 of bonds and stock sold, at an average rate of 91 2-10 per cent. The other securities of the Company have been even more unsaleable. Of the Allegheny County, Pa., bonds only \$32,000 have been disposed of during the year at an average rate of 72 per cent. After recounting the various financial disappointments to which the Company has been exposed, the report says:

The Board had anticipated the satisfaction of reporting to the stockholders at this meeting, that the floating debt of the company was entirely extinguished, and that the work on the eastern division of the road was in progress. Indeed, they had even indulged the hope that the capital to complete the entire work might have been, by this time, secured, and contracts for its more difficult sections have been now in progress.

Had the past year been one of decided ease in the money market, not to say of that abundance in capital which many years of the past history of the country have witnessed, and had matters taken a different direction in Allegheny county, these expectations might have been all fulfilled.

The Board can not, indeed, report as encouraging a condition of the company's affairs, but they are enabled to say that the floating debt, although not paid off, has been reduced from \$788,862 86 to \$513,403 49, and is in course of rapid liquidation—that the western division of the road has been completed, and is in operation—the work at the Sand Patch Tunnel, carried on up to the first of October last, and a complete and careful location of the whole road made, so as fully to prepare it for construction, without delay, whenever the necessary capital can be obtained.

The Treasurer's report, appended in tabular form, will exhibit the details of the financial state of the Company. It will appear, from an examination of this document,—

That of the floating debt, there has been paid off \$275,450 37, within the year.

That there has been expended during the same period, \$231,595 81 upon construction, equipment, surveys, right of way and real estate, of which \$185,021 33 was upon the western, and \$46,574 48 upon the eastern division.

That the whole expenditure, under the same heads, from the first organization of the Company, in 1856, to this date, has been \$1,620,589 18, of which \$1,423,603 42 was

upon the western, and \$197,085 76 upon the eastern division.

That the total interest paid upon the floating debt has been \$173,168 11; upon the company's own bonds, \$300; and the Baltimore city million loan to the company, \$19,308 09; upon Allegheny county bonds, \$59,580; upon Pittsburg city bonds, \$89,130; and upon stock held by individuals, \$13,691 44—making the whole interest account, (including commissions, &c.,) \$361,475 59 from the commencement.

That the discounts and commissions on bonds and stocks sold, have been \$222,750 96.

That of the principal of the million loan from the city of Baltimore, there have been paid \$12,000, as the first installment of the sinking fund established by the mortgage deed to that city.

That the Larimer suspended debt is now \$170,012 88, being less than it was a year ago by \$9,500, received during the year from the assignee of that gentleman.

That the revenue of the year from the western division of the road, between Turtle Creek and Connellsville, has been \$45,566 73, the whole distance of 48 miles having been in operation only nine months of the year.

The subscriptions and loans, in bonds, stocks and money, constituting the entire resources of the company from the commencement, are as follows:

Pittsburgh City bonds, paid for her subscriptions at par.....	\$ 500,000
Allegheny County bonds " " .....	750,000
Connellsville Borough bonds " " .....	100,000
M'Keesport Borough bonds " " .....	100,000
City of Baltimore stock and bonds, exchanged for Company's bonds, guaranteed by that city.....	1,000,000
Cumberland subscription, in her own bonds.....	200,000
Individual subscriptions to capital stock.....	467,850
Real Estate bonds, issued for Pittsburg Station property.....	100,000
	\$3,207,850

The total amount expended, as shown by the Treasurer's general statement of the company's account is \$2,285,605 69.

The assets still undisposed of, and rated at their par or nominal value, are.....	\$1,076 677 28
This includes the \$170,012 88 due by William Larimer, Jr., and does not include the Cumberland subscription of \$300,000.	
Adding the uncollected stock subscriptions, exclusive of subscription by contractors, payable in work, say.....	199,659 93

And we have a total of.....\$1,276,337 21

Out of the proceeds of these securities, subscriptions, &c., the remainder of the floating debt of the Company is to be paid; and to suppose that they would not be more than sufficient to meet that debt, would assume a degree of depreciation which, unfavorable as are all present circumstances, could hardly be expected to take place. So entirely unsaleable, however, are the Allegheny County bonds, so unmarketable have always been the bonds of the boroughs, so doubtful the stock collections, and so more than doubtful the suspended debt, that it would not be prudent to attempt an estimate of what these assets may produce, or how much, if anything, will be left, after discharging all the obligations of the company, other than the interest upon the county and city, and private subscriptions, and the loan of the city of Baltimore.

The stockholders will not be surprised at the inability of the Board to meet this accruing interest, when the condition of the assets just enumerated is considered—not only unsaleable but locked up as collateral securities.

The best consolation under these depress-



ing circumstances, is, that none of the creditors of the company are left unsecured in such manner as has been within the power of the Company to protect them against ultimate loss, although they have not been able to guard them against present inconvenience.

#### PHILADELPHIA, WILMINGTON AND BALTIMORE RAILROAD.

The meeting of the stockholders of this company, at Wilmington, Del., on Monday, was well attended. Andrew C. Gray of Delaware was called to the chair. The annual report was deemed highly satisfactory, and shows not only great value in the property of the company, but economy in its management. The receipts for the past year were \$1,143,852. For 1856, \$1,139,165. Increase in 1857, \$4,687. The expenditures of all kinds for 1857 were \$842,628. In 1856, \$903,042. Decrease in 1857, \$150,414. This shows a gain in 1857 over 1856 of about \$155,000, and, when we remember the general, almost universal depression of the past year, is a flattering exhibit. An ordinarily good business year would have carried the revenue to more than twelve hundred thousand dollars. As soon as business again revives, it is expected there will be a large accession to the traffic of the road.

The following officers of the road were elected: President, Sam'l M. Felton. Directors—Moncure Robinson, Wm. L. Savage, Ambrey H. Smith, Joseph C. Gilpin, John A. Duncan, Jesse Lane, Wm. W. Corcoran, F. A. Curtis, John C. Groome, Jr., Thomas Kelso, Columbus O'Donnell, Enoch Pratt and Thomas Donaldson. Secretary and Treasurer—Alfred Horner.

From the annual report of the Company we take the annexed extracts:

#### CONNECTIONS OF THE ROAD.

There is now a continuous line of railroad from New York and Philadelphia to Memphis, Tennessee, by way of Wilmington, North Carolina, and in a few months, there will be another and a shorter continuous line to the same point, by way of the Virginia and Tennessee Railroad, through Lynchburg, Virginia. Through tickets have lately been made from New York and Philadelphia to Charleston, South Carolina, Savannah, Georgia, and Havana. By the completion of the Northeastern Railroad from Florence, on the Wilmington and Manchester Railroad to Charleston, South Carolina, a short and expeditious route has been opened, by which passengers can reach Charleston, Savannah and Havana at least twelve hours earlier than by any other route, and avoid the rough and dangerous navigation around Cape Hatteras. This safe and quick inland route will command a very large portion of the Southern business, as soon as it becomes generally known. The routes to the great West, by the Baltimore and Ohio Railroad, are becoming every year better known and more appreciated, and, when the trade of this region again revives, these routes will give full employment for all our motive power and cars.

#### NEW YORK.

Since the last Annual Report, the following new work has been done: 3,500 feet of new track has been laid in the depot yard, and near the depot, at Philadelphia, and a new shed has been built for the accommodation of the milk and market business. A new abutment has been commenced at Gray's

Ferry Bridge, and considerable progress made on it; 40,816 feet of new track have been laid on the main road and turnouts, including new track at Principio, and the whole of the Newcastle and Frenchtown R. R., between Newcastle and the Junction of the Delaware Railroad (7 91-100 miles) has been relaid on a new roadbed of sand and gravel, making on the main line and the Newcastle and Frenchtown Railroad, 17 92-100 miles of track relaid within the year. All the abutments and piers of Marcus Hook Bridge, amounting to about 1,000 cubic perches, have been rebuilt of cut stone, laid in hydraulic cement, in the most thorough manner. A large wharf at Perryville has been rebuilt, and a part of it filled up solid. A new tank, tank-house, and steam engine for pumping water at Perryville has also been nearly completed. Bush and Gunpowder bridges have been renewed, so far as there was found any defective timber in them, and the remaining part of Back River Bridge has been entirely rebuilt. A new engine-house, machine and blacksmith shops have been nearly completed at Baltimore, to take the place of the old dilapidated buildings at Canton. These buildings are ample for all the machinery on that end of the road for many years to come.

#### PRINCIPIO IMPROVEMENT.

This work was so far completed as to be put into use the last of September. Its whole cost has been \$105,481 01. The work has been thoroughly done, and there is no perishable material about it, except the track. Though a costly work, yet it will prove economical in the end, from the substantial nature of the work, being a stone arch and an embankment of gravel, instead of a long bridge as originally projected.

#### NEW TICKET SYSTEM.

A new ticket system has been adopted, better calculated than the old to prevent fraud by the use of the same ticket more than once. The new tickets specify the stations between which they are good, are numbered consecutively, and dated when sold. They are current only on the day on which they are sold, and are so arranged in a set of cases that they can be sold only in the order of the numbers. Such as are sold to each train are taken up by the conductors, returned to the office, and the highest numbers collected registered; the ticket seller being responsible for all from the lowest to the highest number taken up.

To discourage the payment of fares in the cars, ten cents more is charged to all those who do not buy tickets at the offices, on all sums under and equal to one dollar, and ten per cent. more for all sums over one dollar—so that the passage between Philadelphia and Baltimore costs the traveler three dollars and thirty cents if paid in the cars, instead of three dollars. The conductors are all put under bonds to enforce this among the other rules and regulations of the Company. They have no discretion whatever to relax this rule or pass any one free. All passengers must have a ticket or a pass signed by the proper authority, or pay the increased fare. It is believed that these rules, properly enforced, as it is our intention they shall be, will add a good many thousand dollars to our revenue.

#### THE CONTRACT SYSTEM.

This system, which promised so well at the time of the last annual report, has continued

to answer all our expectations, and so well that on the first of August last, the termination of the old contract, a new one was executed with Messrs. Barrett, Stearns & Co., for the same service as for last year, and several other branches in addition. A contract has also been made with Mr. T. W. Bowers for the repairs of all cars and for furnishing all oil, waste and fuel for all the stations and cars, and also for some other items of service. Several other contracts have also been made with other parties; so that now nearly all the service, excepting repairs of bridges, that of the Treasury Department, and that of the Conductors and Supervising officers, is performed by contract, instead of at fixed salaries. Nothing can more effectually secure promptness, and energy, and thoroughness, than this system properly carried out in the hands of faithful contractors. Everything, however, depends upon the selection of capable, honest, and efficient men.

#### POLICY OF MANAGEMENT.

It has been our greatest anxiety to free the company from floating debt, regarding such a debt as almost fatal to the prosperity of any corporation. We have been thought by some of the stockholders ultra-conservative on this point; but we believe the events of the past year will satisfy all that a floating debt for a corporation is no matter to be trifled with. The corporation is now, and has been to all intents and purposes for some time, free from floating debt, and thus it stood through the late financial crisis in an impregnable position, met all the demands that were made upon it, and paid its regular dividend without borrowing a dollar of any one. The general prostration of business is now greatly reducing its net profits; but it is in a far better condition than it could otherwise have been.

The position of our road is not favorable to the rapid development of a freighting business. Most of the prominent points are accessible by water, and the water carriage between Philadelphia and Baltimore has heretofore commanded nearly all the freight between the two cities. Two such cities without such water carriage would ordinarily furnish a revenue from freight equal to that from passengers. It is, however, only during the close of navigation that we have any considerable revenue from freight carried from one city to the other. This comes at a time of year when the expenses incurred is very heavy. Could we have a steady freight business the whole year, we could do it at lower rates, and with more satisfaction to our customers.

#### PASSENGER CARS.

The passenger cars are all in better order than at the time of making the last report. It will be observed by the schedule of cars that five new ones have been added within the year, and these, with those on hand at the beginning of the year, it is expected will be ample for a year to come.

#### TRACK.

The whole track is now in a condition that may safely challenge comparison with any other road in the country. It is smooth and well laid, and kept in good adjustment and repair. The trains never fail of making their regular time, either by day or by night, through any deficiency in the track.



## PORT DEPOSITE BRANCH RAILROAD.

This work is still unfinished, though some progress was made during the past year. The land damages have not yet been all adjusted, and the work will not proceed to completion till reasonable and equitable adjustments can be made with all land owners along the line. Railroad companies can not afford to submit to such unreasonable exactions for land damages as they have heretofore, and the people who desire the accommodations afforded by railroads must learn to value their lands at about their intrinsic worth.

## SUSQUEHANNA FERRY.

This Ferry—including the boats and docks, and approaches—is in good condition to perform all the services that will be likely to be required of it. Its capacity will not be reached for many years to come. The boat has never but once, and that for a short time only, been stopped by the ice.

## PACIFIC RAILROAD BILL.

The following is a copy of the bill introduced into the Senate on the 20th inst., by Mr. Gwin. It was made the special order for Monday, the 1st of February:

**A BILL** to authorize the President of the United States to contract for carrying the United States mails, troops, sailors, seamen, the supplies of the army and navy, and all other government transportation by railroad from the Missouri River to San Francisco, in the State of California.

*Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled,* That the President of the United States be, and he is hereby, authorized and directed to enter into a contract or contracts for the transportation of mails, troops, seamen, munitions of war, army and navy supplies, and all other government service, by railroad, from a point on the Missouri River, between the mouths of the Big Sioux and Kansas Rivers, to San Francisco, in the State of California, on the most eligible route, reference being had to feasibility, shortness and economy.

**Sec. 2. And be it further enacted,** That the President shall cause advertisements to be inserted in two newspapers in each State and Territory, and in the District of Columbia, for a period of not less than three nor more than six months, inviting sealed proposals for the construction of said railroad, and for performing the service therein required, as follows:

*First:* The time in which it is proposed to construct and finish the entire road and put the same into successful operation, which period shall not exceed ten years from the execution of the contract: also what extent and portion of said road, beginning at the Eastern and Western terminus and progressing continuously until finished, shall be completed and put in operation during each and every year.

*Second:* The time in which said party will surrender said road, with rolling stock and all its appurtenances thereunto belonging, to the United States, for the purpose of being transferred to the several States which may hereafter be formed out of the Territories through which it may pass, as herein provided.

*Third:* At what rate per mile per annum, not exceeding \$300, it is proposed to carry the United States mails daily, both ways, on said road under the direction of the Post Office Department, for the period of twenty years from the completion of the road, and also for the portion thereof which may be in use while said road is in course of construction; and at what rate per mile, for a like period, upon each section, as it is completed, it is proposed to carry on said road, under the direction of the proper departments, all military and naval supplies, troops, seamen, passengers and freights of all kinds for government purposes, with the limitation that the price to be paid shall not, in any event, either of peace or of war, exceed the sum which in time of peace has been heretofore paid for similar service of equal amount upon any existing route. After the expiration of said contract, said transportation, postal, military, naval, and for every other Government purpose, shall be performed on said road, under the direction of the proper department, for reasonable prices, not exceeding those paid on other first class railroads, to be ascertained by Congress, in the event of a disagreement between the Government and the contractors or owners of said road.

**Sec. 3. And be it further enacted,** That said proposals shall be opened by the President, after due notice, in the presence of his Cabinet and such persons as may choose to attend; and he is hereby authorized and directed to enter into a contract for the transportation provided for in this act, with the party whose proposal shall be by him deemed most advantageous to the United

States for the full and complete performance of said contract, in compliance of the provisions of this act. And the party with whom said contract may be made, as a guarantee for the faithful performance of the same, shall deposit with the Secretary of the Treasury the sum of five hundred thousand dollars, or the value thereof in bonds or certificates of stock of the United States, which may be subsequently withdrawn in sums of ten thousand dollars, as the work progresses, on production of vouchers showing to the satisfaction of the Secretary of the Treasury that an amount equal thereto has been expended in the construction of said road. All questions of damages and forfeitures by reason of any breach of said contract shall be determined by the express terms and conditions of the same; *Provided,* That this act shall be taken and considered as part of any contract that may be made in accordance with its provisions, in like manner as if the same was set forth in said contract.

**Sec. 4. And be it further enacted,** That, in consideration of the stipulations and undertakings in said contract, there shall be and is hereby appropriated a quantity of the public lands equal to the alternate sections, for the space of twenty miles on each side of said road, from its Eastern and Western terminus, to be selected from the sections designated in the public surveys of odd numbers, and to be held and conveyed as herein provided. And in all cases where the United States may have disposed of said lands or any part thereof, or from any cause cannot convey a legal title thereto, the deficiency may be made up from any unoccupied and unappropriated public lands within a distance of forty miles on either side of said road; *provided* that all mineral lands within the State of California be and the same are hereby excluded from the operation of this act, and in lieu thereof a like quantity of unoccupied and unappropriated agricultural lands nearest the line of the road through said mineral lands may be selected in alternate sections.

**Sec. 5. And be it further enacted,** That the party with whom the contract or contracts aforesaid may be made shall proceed without delay to locate the general route of said road, and furnish a detailed survey and map thereof to the President, who shall cause the public lands on each side of said road, to the extent of 40 miles, to be surveyed, and the Indian title thereto within the Territories to be extinguished as soon as practicable. And the provisions of the act of September, 1841, granting pre-emption rights, and the acts amendatory thereof, shall be, and the same are hereby, extended to the lands thus surveyed, excepting those herein set apart and appropriated for the use of said road: *Provided,* That so soon as a contract is made, in pursuance of the provisions of this act, for the construction of said road, it shall be the duty of the President to cause the public lands for 40 miles on each side of so much of said road as the contracting parties shall indicate to be withheld from settlement, sale or occupation until the lands shall have been surveyed, and the alternate sections selected as provided for in this act.

**Sec. 6. And be it further enacted,** That in making said contract it shall be stipulated that the said road shall be divided into sections of twenty-five miles each, and that none of said lands are to be conveyed to the contracting parties until one of those is completed and put into successful operation, when the President shall convey by patent to the contracting party three-fourths of the land pertaining to the section so completed, retaining the other fourth as security for the completion of the next section of twenty-five miles; and when the next is completed, the President shall, in like manner, convey to the contracting party three-fourths of the land pertaining to that section, together with the remaining one-fourth on the previous section; and so on with each succeeding section, conveying three-fourths and retaining one-fourth as security for the completion of the rest, until the last section of the road is finished and put into operation, when the President shall convey to the contracting parties the residue of the lands hereby appropriated; and said contract shall require that the United States Mail shall at all times be carried on said road, under the direction and control of the Postmaster General, and all other Government transportation provided for in this act shall be performed under the direction of the proper Departments respectively, and the compensation therefor at the prices specified in the contract or contracts shall be regularly paid from the Treasury of the United States quarterly, or at such times as may be agreed upon.

**Sec. 7. And be it further enacted,** That the President be, and he is hereby authorized and directed, so soon as one section of 25 miles of said road is made and put into successful operation, to cause to be issued to said contracting party bonds of the United States bearing not exceeding five per centum per annum interest; which interest shall be payable semi-annually, and the principal payable nineteen years from the date of their issue, to the amount of \$12,500 for each mile of the same; and in like manner, when another section of 25 miles is made and put into successful operation, an equal amount of bonds shall be issued and delivered to said contracting party; and so with each succeeding section, until the whole road shall have been completed; *Provided,* That the entire amount of bonds hereby authorized to be issued on account of said road shall in no event exceed, in the aggregate, the sum of \$25,000,000, it being the intent of this act to advance to the contracting party \$12,500 for each mile of road completed and put into successful operation; which sum of money thus advanced, together with the interest thereon, is to be repaid to the United States by the said contracting party in the transportation and service provided for in this act; and compensation, other than the lands appropri-

ated and bonds authorized to be issued by this act, shall be made to the contracting party for transportation and service rendered under their contract until the value for such transportation and service shall be equal to the aggregate amount of the principal and interest of said bonds; *Provided,* That all duties on railroad iron imported and laid down on said road shall be charged to the contracting party and paid to the United States by deducting the amount from the credit to be given for the service first performed under this act; *Provided,* That if American manufactured railroad iron of equal qualities shall be offered to the said contractor or contractors, which, including all items of cost of manufacture, sale and delivery, shall not exceed the like cost of such iron if obtained from foreign countries, the American manufactured iron shall be preferred and used by said contractor or contracting party.

**Sec. 8. And be it further enacted,** That should said contracting party neglect or in any way refuse to prosecute the work undertaken by them in a manner to secure the completion thereof in compliance with the contract, or should violate the terms of said contract, then all rights of said contracting party to said road, right of way, lands or other property pertaining thereto, including such amount of the deposited stock, if any, that may remain unexpended, shall be and become forfeited, and the United States may enter upon and retain the same. In the event of such forfeiture to be determined by the President, he shall proceed to re-let that portion of the road remaining uncompleted under such forfeited contract, and provide for the disposition of the work in such manner as will secure the earliest completion of the road in conformity with the provisions of this act; *Provided,* That he shall not stipulate, on the part of the United States, for any higher or other terms than are authorized and provided for in this act.

**Sec. 9. And be it further enacted,** That the contracting party receiving land under the provisions of this act, shall be required to sell and unconditionally convey one-half of the same within five years from and after the issuing of the patents for the same; and all lands so granted, which shall remain the property of such contracting party, or which may be held by themselves or others for their use or benefit, at the expiration of ten years from the date of the patents shall be and become the property of the United States.

**Sec. 10. And be it further enacted,** That the lands of the United States for two hundred feet in width along the entire line of said road is hereby set apart and dedicated for a highway, for railroad and telegraph purposes, under the direction of Congress; and the said contracting party may take any earth, stone, timber, or necessary material for the construction and keeping in repair of the road within the said two hundred feet; any contract made in pursuance of this act for the building and keeping up of said road shall provide for its construction in a substantial and workman-like manner, with all the necessary drains, culverts, bridges, viaducts, crossings, turnouts, stations, and watering places, and all other appurtenances, including furniture and rolling stock, equal in all respects to railroads of the first class when prepared for business, with rails of the best quality, weighing not less than 75 pounds to the yard, and a uniform gauge of six feet throughout the entire length of said road; also for the construction of a telegraph line, of most substantial and approved description, to be operated along the entire line of said railroad; *Provided,* The contracting party shall not charge the Government higher rates than they do individuals for like telegraphic service.

**Sec. 11. And be it further enacted,** That the contracting party building or owning said road may at any time construct one or more additional tracks within the 200 feet set apart for the right of way; and it shall be the duty of said contracting party or owners of said road, to permit any other railroad which shall be authorized by the Legislature of any Territory or State in which the same may be situated to form connections with it on fair and equal terms.

**Sec. 12. And be it further enacted,** That whenever said road, or any part thereof, shall be surrendered to the United States, in pursuance of the provisions of this act, thereupon so much of the same as may be situated within any State shall, with its assent, vest in and become the property of such State, subject to the use of the United States for postal, military, naval, and all other Government service, and also subject to such regulations as Congress may impose restricting the charges for such transportation; and any other State through which said road may pass, admitted into the Union thereafter, shall acquire the same rights, subject to like restrictions and provisions.

**Sec. 13. And be it further enacted,** That while said contracting party or owners are in any manner indebted to the United States they shall keep books, in which shall be entered regular statements of all disbursements, expenditures and receipts, setting forth specifically the objects of said expenditures and the sources whence said receipts are derived, together with a particular account of all accidents that may occur affecting property or persons, or causing delays upon the road, which books shall be open at all times to the inspection of the President, or any person authorized by him to examine the same, and to the members of each House of Congress; and the contracting party or owners shall report annually to the Secretary of the Treasury, on the first day of October in each year, accompanied by a minute and detailed exhibit of the expenditures and profits of said road and telegraph for the year preceding, to be attested by the oaths of their Secretary and Treasurer, which report shall be transmitted to Congress by the Secretary at the commencement of each session.



## CLEVELAND AND MAHONING R. R.

The Directors of this company have issued a circular to the stockholders in which they state that the company is embarrassed with a floating debt rendered imperatively necessary by the purchase of rolling stock and machinery. They propose to fund this debt, in the following manner.

"To accomplish this purpose we suggest the following plan:—You are aware that the company has already executed a first mortgage of \$850,000, and a second mortgage of \$500,000. We propose to use a third mortgage for 1,150,000 of seven per cent. convertible bonds, of which \$550,000 shall be deposited with a trustee for the sole purpose of redeeming the second mortgage bonds of \$500,000 above named, thus leaving 600,000 in the hands of the company for sale. Of these \$600,000 we propose to offer to the stockholders \$400,000 at par, payable one half in stock at par and one half in money, as follows: 20 per cent. on the 15th January next, 20 per cent. on the 1st of March, 20 per cent. on the 15th of April, 20 per cent. on the 1st of June, and 20 per cent. on the 15th of July, the interest account to be adjusted in settlement of the last instalment. If the entire amount is not taken by the stockholders the same proposition to be made to others.

"The nature of the transaction and the nature of the security will be as follows: Assuming all the bonds issued that can be issued under this arrangement, the bonded debt of the company may be as follows:

1st Mortgage.....	\$850,000
2d Mortgage.....	500,000
3d Mortgage.....	600,000
Total.....	\$1,950,000

Or, in case the second mortgage bonds are cancelled and exchanged for the third mortgage bonds by the trustee, as provided in said mortgage, and as will in part, at least be the case, the debt may be—

1st Mortgage.....	\$850,000
3d Mortgage, which will then become	
2d Mortgage.....	1,150,000
Total.....	\$2,000,000

In any event it cannot exceed two millions of dollars. That this amount of indebtedness is fully secured by the road is sufficiently proven by the results of the business to the present time.

"The road was opened the entire distance to Youngstown the 24th day of November 1856—having been previously opened to Girard. The earnings for twelve months have been as follows:

"Statement of Gross Earnings and Operating Expenses of the Cleveland and Mahoning Railroad from November 1, 1856, to October 31, 1857, both inclusive.

Months.	Gross Earnings.	Running Expenses.	Net Earnings.
November.....	11,673 16	5,743 12	5,930 04
December.....	14,000 44	6,317 44	7,682 00
January.....	12,958 67	6,199 43	6,759 24
February.....	13,212 63	6,815 94	6,396 69
March.....	16,421 66	7,673 94	8,747 68
April.....	22,299 95	8,500 99	13,798 96
May.....	29,612 93	9,629 75	19,983 11
June.....	32,833 69	10,214 34	18,619 35
July.....	34,951 04	9,120 87	25,830 17
August.....	32,758 93	10,232 60	12,526 33
September.....	22,440 45	8,931 42	13,509 03
October.....	12,925 50	7,107 52	11,818 07
	253,898 07	96,496 49	157,401 67

"Showing net earnings of \$157,401 67 as the results of twelve months business. How the business of a road on opening ordinarily compares with the subsequent business is well

known. There are many roads in the United States which did not more than pay expenses the first year of their operation, that are now among the best established and most successful companies in the country.

"There is no question of the rapid increase of the business of our road. The first year—of which the results are exhibited above—began during an unusual agricultural dearth and has ended in a financial crisis which has paralyzed all commercial affairs. It is hardly possible that so unfavorable a year can soon occur again; and yet, the preceeding statement is sufficient to show that the indebtedness herein proposed to be created, even if all the bonds were issued, would be fully secured by the road in its present condition. To the stockholder who avails himself of the proposition it presents the following advantages.

"First—It affords an opportunity of exchanging a portion his investment which is not paying dividends and can not do so in all probability for some years to come, or until the road is completed and its debts paid, for an unquestionable interest paying security at seven per cent. per annum.

"Second—It protects the residue of his investment from the certainty of great loss by the enormous rates of interest which the company will be compelled to pay upon its debt in its present condition, and from possible sacrifices of large portions of their property.

"Up to this period, the directors have freely used their own personal credit and private means to assist the company. Having, however, thus finally placed the road in a condition to furnish perfect security for all the funds necessary to discharge its liabilities, they now feel fully entitled to demand the assistance of the stockholders, and in case of failure to receive it, will feel under no obligations to resort to the same personal sacrifices of time, credit and money in future.

"It is perhaps proper here to say that in contemplation of the completion of the North Western Railroad and the large through business in merchandise and produce between the Eastern cities and the North Western States, that must then fall upon our line, and the consequent necessity of large harbor accommodations, together with the great prospective demands of our coal traffic, have led us to purchase a much larger amount of real estate in this city than is held by any other railroad companies here, and than has been usual elsewhere.

"The difficulties of the country entailing difficulties on our connecting roads and deferring for a period the accomplishment of our plans, have in no degree diminished our confidence in their ultimate success. In the meantime, however, the investment of the company in real estate at this terminus of the road has made a heavy draft upon the means of the company, but it also furnishes a large additional security for the loans of the company, including as it does more than a mile of water front upon the harbor of the city, and more than fifty acres of land worth at low values at least \$325,000. The equipment of the road is all in good order and has cost over \$220,000.

"The mortgage deed to secure the issue of bonds proposed has been executed to Joseph Perkins, of Cleveland, and Robert W. Taylor, trustees, a copy being hereto annexed; the bonds have been executed and \$550,000 of them, as provided in the mortgage, have been deposited with the trustees for the redemption

of the second mortgage, a certificate of which is also hereto attached.

"The bonds hereby offered for sale have the benefit of a sinking fund heretofore created, and are also further secured by a special sinking fund, a copy of the resolutions creating which is hereto annexed.

"It is also understood that if a larger amount of bonds is subscribed for than now offered for sale, it shall be distributed among the stockholders pro rata in proportion to their stock.

"In conclusion, the undersigned beg leave to express their entire confidence in the character of the securities here offered. The utmost care has been taken in drafting the mortgage, and in creating the special sinking fund, to protect the rights of the holders of these bonds, and no contingency which we can foresee, can in any possible event defeat them.

Directors.—Jacob Perkins, Fred Kinsman, Chas. L. Rhodes, David Tod, Dudley Baldwin, Charles Smith, Reuben Hitchcock.

## CERTIFICATE OF TRUSTEES.

"We acknowledge that we have received from the Cleveland and Mahoning Railroad Company, the following third mortgage bonds of said company, to wit:

Nos. 1 to 150 inclusive	150 bonds of \$100 each	\$15,000
" 251 " 400 "	" 150 "	300 "
" 501 " 1000 "	" 500 "	500 "
" 1100 " 1640 "	" 240 "	1000 "
		240,000

In all five hundred and fifty thousand dollars, in trust for the redemption of the second mortgage bonds of said company.

Joseph Perkins, Robt. W. Taylor, Trustees.

## RESOLUTIONS AS TO SPECIAL SINKING FUND.

"Resolved, 1st. That a special sinking fund shall be and hereby is created of \$15,000 per annum for the payment of \$600,000 of the bonds issued under the third mortgage created by this company, by date of March 27, 1857, which bonds are numbered as follows, to wit: Numbers one hundred and fifty-one to two hundred and fifty inclusive; four hundred and one to five hundred inclusive; one thousand and one, to fourteen hundred inclusive; and sixteen hundred and forty-one to two thousand inclusive.

"2d; Said sinking fund shall be paid as follows: \$7,500 on the first day of each July and January in each year, commencing on the first day of July, 1858, to Geo. Tayler, Esq., of Warren, Trumbull county, Ohio, or in case of his death or resignation to a successor to be appointed by the Board of Directors of this company, as trustee under the following trust, to wit: To invest the same in said bonds at his best discretion, provided the same can be purchased at a price not exceeding the par value thereof; and if not, either in them or such other good securities as may be designated by the Board of Directors of this company. All of the above bonds so bought as above for the sinking fund hereby created shall be endorsed on the face of the same as follows, to wit: "Purchased for the special sinking fund of the Cleveland and Mahoning Railroad Company, and no longer transferable;" but the interest coupons attached to said bonds shall continue to be paid to said trustee and the proceeds thereof invested by him under the same trust and in the same manner as the principal of said sinking fund.

"Said sinking fund shall continue until all said bonds shall have been paid

"Resolved, That said \$600,000 of bonds numbered as above are hereby made conver-



tible at par into the stock of this company at par any time at the option of the holder previous to their maturity by the delivery of such bond or bonds, with the unexpired interest coupons annexed, to the treasurer of this company."

This road is 85 miles long. Its capital stock is \$1,500,000. And it is now proposed to make its bonded debt \$2,000,000. Its net revenue as per statement given in circular, was \$157,401.67. Our readers can therefore judge for themselves of the amount and character of the security offered for the investment.

#### LEHIGH VALLEY RAILROAD.

The Directors of the Lehigh Valley Railroad Company present to the stockholders the following Report for the year ending Nov. 30th, 1887:—

The Lehigh Valley is mainly a coal-carrying road; more than 75 per cent. of its receipts being derived from the transportation of that article.

The whole amount carried over the Road during the past year, was 418,235 tons, and was distributed as follows:—

To the Belvidere Delaware Railroad.....	121,648 tons
" Central R. R. of New Jersey.....	82,102 "
" North Penn. Railroad.....	43,239 "
" Morris Canal.....	14,022 "
Delivered on the line of the Road.....	157,223 "
Total.....	418,235 "

Equal to 342,970 tons transported over the whole length of the road, at a cost of 39.7 cents per ton.

During the same period, there were carried 128,158 passengers, equal to 42,627 over the whole length of the road, at a cost of 60.7 cents per passenger.

The following is a statement of the ordinary receipts and expenditures.

#### RECEIPTS.

To Coal transportation.....	\$337,074.62
Passengers do.....	70,786.03
Miscellaneous freight.....	29,280.96
Mail.....	4,045.83
Total.....	\$441,187.46

#### EXPENDITURES.

For Coal transportation.....	\$136,304.67
Passengers do.....	25,896.66
Miscellaneous freight.....	10,106.27
Mail.....	154.99
Total.....	172,462.52

Balance net earnings.....	268,724.87
Against which has been charged:	
Interest on Bonds.....	76,710.00
" " floating Debt.....	34,418.51
Salaries of President and Treasurer, and expenses of Philadelphia Office.....	8,928.98
Total.....	120,057.49

Leaving a credit balance of..... \$148,667.38

It is proposed to credit the dividend account with \$107,670, being six per cent. upon the amount of stock issued; and the balance, \$10,997.38, to the contingent account, against which will be charged the future purchases of iron and materials necessary to maintain the work.

The road having been in operation but two years, the officers have not learned from actual experience the average deterioration of the superstructure and machinery, but the above amount is a very large allowance for that object.

During the year there has been expended upon construction.....	\$98,892.12
" " machine shops.....	6,000.00
" " telegraph line.....	2,440.00
" " real estate.....	2,847.80
" " locomotives.....	47,250.00
" " cars.....	104,477.96

There are laid and in use 57.8 miles of track, as follows:—45.72 miles of main track, and 12 miles of second track and sidings. There are also eight miles of grading ready to lay, making nearly one-half of the whole road graded for a double track.

The plan pursued by the Company, of gradually pushing out the double track, will, in the course of a few years, secure its completion; the excavations, bridging and masonry being calculated for a double track.

The equipment of the road consists of 15 locomotive engines, 6 passenger and 2 baggage cars, 504 five ton and 305 ten ton coal cars, besides 61 platform, gravel, ore and hand cars, equal to the transportation of 500,000 tons, of coal, with the estimated passenger and merchandize business.

The engine houses, water stations and shops are sufficient for the business of the year, and it is the purpose of the Board to limit the expenditures to the ordinary repairs.

If this purpose is rigidly adhered to, and the business of the year proves equal to the last, the Company will be able to liquidate the entire floating debt.

Though the amount of this debt is not large, yet such is the distrust of the public in regard to railroad securities, that the Board have had to submit to the dictation of the rates of interest, which the ability of the Company for ultimate payment ought to have secured them from.

We have also had the mortification to see our Bonds linger at prices much below their value, when compared with other securities upon the market.

The first and only mortgage upon the Road is for 1,500,000 dollars. The interest has been punctually paid out of the earnings, leaving for the stock during the past year six per cent., with a large contingent fund.

That bonds of this class should command but 65 per cent. at this time, is an indication that capitalists have not informed themselves of their real value.

The peculiar location of this road is such as to command a large trade with the least outlay of capital. At Manch Chunk it connects with the Beaver Meadow Road, by which it has access to the extensive and rapidly developing coal fields of the Upper Lehigh.

The success of the Beaver Meadow Railroad, now paying 10 per cent. per annum on its stock, is some assurance of what the Lehigh Valley may do in a short time.

At Bethlehem, we connect with the North Pennsylvania Railroad, and at Easton with the Belvidere, Delaware, and Central Railroads of New Jersey, thus giving us the benefit of three commanding outlets, all competing for the trade of our Road, and saving us from the cost of expensive terminal arrangements.

The Folesville Railroad, extending from Catasauqua to Folesville, in Lehigh county, was completed during the past year.

This road was constructed for the purpose of affording a supply of iron ore to the various furnaces along the line of the Lehigh Valley Road.

This trade, now of great magnitude and importance, is destined to a large annual increase, the valley of the Lehigh possessing advantages for the production of iron unsurpassed by any locality in the United States.

The grades are highly favorable, being an easy descent in the direction of the trade. As an evidence of this, we will state the performance of two of our engines.

During the six months from April to September, inclusive, the engine "Catasauqua" ran 11,236 miles and hauled 11,231 loaded and 11,246 empty, cars, of five tons each.

In the month of July, the engine "Lehigh" made 26 round trips, with an average load of 535 tons of coal per day.

These engines were built by Norris & Sons upon Phleger's patent for coal burners.

The Board have not aimed to increase their trade by a reduction of the rates below those of the Lehigh Canal, but have relied for their share upon the peculiar facilities which the road affords, for a portion of the business; and we take the occasion to express our gratification with the harmony which exists between the two Companies.

It remains for us to say that the Company are much indebted to the energy and devoted attention of their Superintendent, R. H. Sayre, and their Cashier, John P. Cox, and to the various officers under them, for the performance of their duties.

By order of the Board,

J. G. FELL, President.

#### PRODUCTION OF STEEL, ESPECIALLY PUD- DLED STEEL AND CAST STEEL.

The production of steel is chiefly limited to four countries—England, France, Austria, and Prussia. Sweden, which yields the greater part of the material for the production of steel in England, produces but an inconsiderable amount of steel. The iron exported from that country to England, France, and some other countries, is all smelted with wood charcoal, and the white pig iron is refined with the same kind of fuel. The only iron that is able to compete with this is the Russian iron from the Ural district. Thus, in England, the production of steel is entirely dependent upon Sweden or Russia for the supply of raw material, and in France also this is, for the most part, the case; while, on the contrary, Austria possesses in Styria, the Tyrol, Krain, and Corinthia; Prussia in the Government districts, Coblenz and Arnsberg, immense deposits of spathic iron ore—carbonate of iron—a mineral especially adapted for the production of native steel. Owing to this circumstance, the production of native steel has grown up to a considerable extent in these districts, and, though limited by the supply of charcoal, has maintained these countries, to a certain extent, independent of foreign supply. In Prussia, indeed, at the Lohe smelting works, the iron is smelted with equal parts of charcoal and coke, and there is good reason for believing that equally good iron might be obtained with coke alone.

Considerable progress in the production of steel has been made in Prussia, and various kinds of pig iron have been converted by puddling with coal into steel, which is sold at a very low price, and is suitable for the use of locomotives and railway carriages. This puddled steel, which is produced chiefly in the Siegen district, at Lohe, Geisweide, and Olpe, is of remarkably good quality, and competes with the fine steel produced with charcoal from white iron, in being fit for refining and working up into sheer steel, as well as for making cast steel.

The chief material used for producing cast steel at Hr. Krupp's works at Essen, is puddled steel obtained from the Lohe works. The excellent character of the cast steel thus obtained, for certain purposes, shows that, although steel equal for certain other purposes to English steel has not yet been pro-



duced in Prussia, still there are the means of effecting this object, and of supplying the hardware works of Sollingen, Remscheid, and the Enneper Stasse with steel produced in the country. The cast steel works of Bochum, of Hr. Lohman, in Witten, and others, also employ the same raw material.

The first attempts to convert the Siegen and Musen iron into steel by the puddling operation were made in 1839, by Hr. Stengel, director of the Government smelting works at Lohe, at the puddling works of Hr. Kamp and Hesterberg, at Wetter on the Rhur. It was then satisfactorily ascertained that steel could be obtained by this means, but it was also found to be very difficult to prevent the steel from being mixed with veins of iron.

These experiments were followed, in 1844, by a continued series at the puddling works of Ebbinghaus & Co., at Wickede on the Ruhr, under the direction of Hr. Kolbe; and afterwards of Hr. Zintgraff, who introduced some slight modifications in the construction of the furnaces. At length, in 1846, very satisfactory results were obtained both here and at the puddling works of Geisweide, near Siegen. The importance of the subject then became generally appreciated, and numerous applications were made for patents for methods of puddling steel.

In 1849, steel puddling had become an established industry, and several large works were erected at Limburg, Haspe, Horde, &c. Meanwhile attempts had also been made to employ native steel, obtained in the usual way with charcoal, for producing cast steel; and this was effected first in 1844, by Hr. Huth, at works on the Geitebrücke. In 1847, puddled steel, produced under the direction of Hr. Zintgraff, at Ronnewinkl and Geisweide, was smelted at the steel works of Hr. Mayer and Kuhne in Bochum, and yielded a very good product.

At the Seraing works in Belgium, and at Creuzot, in France, also, steel has been produced by puddling pig iron smelted with coke, and from this puddled steel cast steel has been obtained. It is stated that at Seraing all the tools used in the workshops of that establishment are made of the steel produced there.

In Austria the production of puddled steel does not seem to have been carried out on the large scale. But with the rich deposits of ore that are so admirably adapted for yielding steel, it is obvious that when the use of brown coal in gas furnaces, for puddling and melting steel, has once been established in this country, it will become an important competitor with other steel producing countries, since there will be a sufficiency of charcoal at the disposal of the smelters, for producing pig iron fit for conversion into steel.

In France steel puddling has been practised for some time by M. Holzer, at Unieux, in the same manner as in Prussia.

It is worthy of notice that, in the early part of 1845, it was attempted to effect the conversion of pig iron into steel in the puddling furnace, by introducing a blast of air into the hearth. An arrangement of the same kind was tried in France, by M. Schneider, at Creuzot, but in both instances the result was unfavorable.

The production of steel direct from pig iron by melting it with wrought iron was tried in 1846, at the Geitebrücke works, by Hr. Stengel, at the suggestion of Prof. Karsten.—*London Engineer.*

### TENNESSEE DEBT AND FINANCES.

The following extract is made from the late interesting message of Gov. Johnson, of Tennessee:

#### THE ACTUAL INDEBTEDNESS OF THE STATE.

Internal improvement bonds, bearing interest of 5½ per cent.	\$227,419
Internal improvement bonds, bearing interest of 5 per cent.	1,824,440
Union bank bonds bearing int. of 5 per cent.	240,000
Bank of Tennessee " " 6 " "	1,000,000
State Capital bonds " " 6 " "	841,000
Purchase of Hermitage	48,000
Bonds loaned and endorsed for railroads, etc.	8,589,000
Bonds endorsed for turnpikes	57,000
Agricultural Bureau	30,000
Total liabilities	\$12,866,856

This exhibit shows the actual indebtedness of the State to be four million one hundred and ninety thousand eight hundred and fifty-six dollars and sixty-six cents (\$4,190,856 66.) The stocks owned by the State in banks, internal improvement companies, &c., amount to three million two hundred and ninety-two thousand seven hundred and sixteen dollars and sixty-six cents (\$3,292,716 66,) as will appear by reference to another part of the message. These stocks, when reduced to their market or estimated value, will amount to two million two hundred and forty-four thousand eight hundred and twenty-seven dollars (\$2,244,827.) If this amount is applied to the liquidation of the actual indebtedness of the State, it will reduce that debt to one million forty-seven thousand seventy-nine dollars and sixty-six cents (\$1,047,079 66.) It is the opinion of some correct thinking and judicious persons, as well as my own, that it would be sound policy and economy to dispose of all the stock owned by the State in banks and internal improvement companies, or otherwise, as soon as it can be done on advantageous terms, and to apply the proceeds of the sale of the same to the reduction of the actual indebtedness of the State, and for the State, as soon as practicable, to become entirely disconnected with all corporations whatever, either as partner or stockholder. The six per cent. which would be saved upon the bonds will amount to more than all the dividends which will be paid upon the stock so long as it is owned by the State.

The following tabular statement will show the amount of stocks owned by the State in banks, internal improvement companies, &c., its original cost, and its estimated value at the present time:

#### STOCK OWNED BY THE STATE.

	Original Cost.	Estimate.
Bank of Tennessee	\$1,000,000	\$1,000,000
Union Bank	650,000	650,000
East Tennessee & Georgia R. R.	1,650,000	1,300,000
Franklin and Columbia turnpike	75,850	50,425
Lebanon and Nashville	80,000	48,266
Nolensville	47,000	14,750
Nashville and Charlotte	30,000	20,000
Lebanon and Sparta	85,000	21,170
Columbia Central	139,000	21,171
Nashville and Kentucky	50,000	12,500
Clarksville and Russellville	37,500	2,000
Columbia, Putnam & Elk'n	126,000	12,238
Nashville & Murfreesboro	66,666	30,320
Gallatin & Cumberland	6,000	5,283
Gallatin	130,000	25,000
Cumberland & Stone's River	119,000	20,000
Total	\$3,292,716	\$2,244,827

The foregoing companies pay six per cent. on the estimated value.

It will be perceived from the tabular statement, that the annual indebtedness and liabilities of the State for internal improvement companies and the agricultural bureau will

make the State liable for the sum of twelve millions eight hundred and sixty-six thousand eight hundred and fifty-six dollars and sixty-six cents (\$12,866,856 66) up to this time. And if all the internal improvement companies apply for the aid of the State which have been authorized to do so by the various acts of Assembly which have been passed to encourage works of internal improvement, it will swell the State debt up to not less than twenty million dollars (\$20,000,000.)

**PENNSYLVANIA RAILROAD.**—The receipts of the Pennsylvania Railroad from freight and passengers for the year 1857, over the same amount of road as they had in 1856, amount in round numbers to five millions, or to speak exactly, to \$4,986,015 23; being an increase of \$185,946 49 over the year 1856. This is the best exhibit made by any road in the country, and for a year of commercial panic is extraordinary. The following is the official statement of the receipts for December and for the year:

Receipts of the road for the month ending December 31	\$369,516 20
Same month last year	366,568 93

Decrease..... \$17,352 78

Receipts from January 1, 1857, to January 1st, 1858	\$4,986,015 23
Same period last year	4,800,068 74

Increase..... \$185,946 49

**WHEELING.**—The following are the railroad subscriptions of the city of Wheeling:

Bat. & Ohio R. R.	due in 1872	\$500,000 00
Marietta & Cincinnati	" 1873	250,000 00
Cleveland & Pittsburg	" 1874	50,000 00
Hempfield	" 1879	250,000 00

The annual interest on the above is over sixty thousand dollars. The Wheeling papers notice a growing feeling in that city toward repudiating of the payment of this interest. We trust that this city will not so disgrace itself as to seriously consider the idea of repudiation.

**THE HOUSTON AND TEXAS CENTRAL ROAD.**—We are gratified to learn that this great enterprise is now progressing steadily and surely. We have reliable information that the cars are now running out from Houston 36 miles—the iron still laying, and that 50 miles will be completed for the Spring trade. There is now 60 miles graded. A survey has been made to the Trinity, striking the river at Miller's crossing 6 miles below this place. The engineers found the route straight, with easy grades and altogether better than had been anticipated.

We learn from one of the directors that notwithstanding the hard times and money panic, the company are determined to keep as large a force as possible on the road, and push the road forward as fast as it can be done. Though affected to some extent by the money pressure, the Directory are not discouraged.

Now is the time for our people to render material aid to this important work. It is settled that it will penetrate right through our midst. It is now constantly bringing us into more rapid and cheap communication with market, and every mile it progresses will afford us additional facilities. Self-interest dictates that we should subscribe liberally to its stocks, and that those who have subscribed, should promptly pay up. The money is greatly needed now.—*Houston Telegraph.*







TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r st.	When Payable.	Where Payable.	When Due.	Description of Bond.	Unit of Bonds.	Name of Company.	Quot of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al. & N'dria, Lon. & Hmpsr	.....	173	6,000,000.00	.....	.....	.....	.....
498,800	6			1862-3	2d	.....	Androsog'n & Kennebec	.....	54.55	1,400,000.00	.....	209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange...	.....	86.5	1,000,000.00	.....	278,123.74	173,780.74	4 pr. ct. 6m
52,646	6			now	"	.....	Eng'r, Old T. & Milford...	.....	12.5	135,000.00	52,046.26	39,104.40	2,671.61	15,000 in '53
500,000	7			1860	1st mortgage.	.....	Boston & Worcester...	.....	44 6-8	4,500,000.00	500,000.00	1,108,781.90	437,032.03	180,000 4.6m
500,000	7		N. Y.	1866	Income.	.....	Buffalo & State Line...	.....	.....	1,300,000.00	.....	.....	.....	5 pr. ct. 6m.
300,000	7			1857-9 62	Domestic.	.....	Central Ohio...	.....	.....	.....	.....	.....	.....	.....
200,000	7			1864	4th mortgage.	.....	Champl'n & St. Lawrence	.....	43	1,872,800.00	1,001,087.00	163,200.00	77,700.00	10 per ct.
577,187	6			1872	1st mortgage.	.....	Ch'l'r'to & South Carolina	.....	110	1,750,000.00	380,000.00	291,219.86	47 per ct.	\$72,300
192,206	7			1874	2d	.....	Ch'go, Burl'ngh & Quincy	.....	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m
380,000	7		N. Y.		Domestic.	.....	Chicago, Fulton & Iowa...	.....	.....	.....	.....	.....	.....	.....
1,400,000	7				Convertible.	.....	Cin. Will'ngh'n & Zanes'ville	.....	131	1,761,149.16	2,241,500.00	221,491.96	.....	.....
1,300,000	6-7-8				2d	.....	Cleveland Col. & Cin.	.....	139	4,741,220	.....	1 3 754	700,804	6 per cent.
374,000	8				Income.	.....	Cleveland & Mahoning...	.....	85	1,500,000.00	.....	.....	.....	.....
1,300,000				1873	1st mortgage.	.....	Cumberland Valley...	.....	52	1,218,300.00	.....	160,311.56	\$1,101.56	\$33,250.24
532,000				1861	2d	.....	Dayton & Cin. short line.	.....	52	1,400,000.00	1,000,000.00	.....	.....	.....
104,000				1857-8-9	1st mortgage.	.....	Eastern Railroad...	.....	93 6-10	3,345,000.00	.....	665,578.79	288,077.84	\$24,133
305,500					2d	.....	East Ten. & Virginia...	.....	130	625,450.00	.....	30,897.30	19,692.30	.....
540,000	6				Income.	.....	Essex Railroad...	.....	20	700,000.00	.....	243,970.42	136,061.90	\$133,281.45
43,000	7			1869	1st	.....	Evansville & Crawf'd'vle	.....	109	2,238,657.00	.....	681,162.52	213,837.81	3 per cent.
400,000				1861	2d	.....	The Fitchburg (Mass.) R.R.	.....	.....	3,540,000.00	.....	50,381.33	14,822.45	\$166,240.00
200,000	10			1864	1st mortgage.	.....	Fox River Valley...	.....	33	800,000.00	.....	1,068,202.54	257,689.42	\$166,240.00
						.....	Fair Haven Branch...	.....	15	300,000.00	.....	27,376.69	14,267.67	8 pr. ct.
100,000	6				1st mortgage.	.....	Georgia RR & Banking Co	.....	233	4,156,000.00	.....	2,068,836.00	339,196.50	1,924,382.44
100,000	6				1st	.....	Grt Falls & Conway R.R.	.....	20	4,101,550.00	.....	1,476,035.27	1031,489.08	7 pr. ct.
300,000	6 1-9			1858	1st	.....	Grt West'n R.R. of Cap.	.....	281 1/2	2,000,000.00	.....	324,891.57	.....	3 pr. ct.
4,000,000	7			1869-70	1st	.....	Housatonic Railroad...	.....	74	4,000,000.00	.....	.....	.....	.....
2,000,000	7			1860	2d	.....	Hudson River...	.....	144	4,000,000.00	.....	.....	.....	.....
1,812,000	7			1875	3d mortgage.	.....	Illinois Central R.R.	.....	704	18,433,376.00	.....	.....	.....	.....
12,885,000	7			1876	1st	.....	Indiana Central...	.....	72 4	3,538,376.00	.....	351,871.00	.....	3 pr. ct.
4,115,000	6			1860	Freeland.	.....	Iron R.R.	.....	13	123,700.00	.....	.....	.....	.....
3,000,000	7	Nov. 1		1862	1st mortgage.	.....	Kentucky Con. 2d Div.	.....	.....	719,500.00	.....	.....	.....	.....
600,000	7	Jan. & July 1			2d	.....	Knoxville & Kentucky	.....	.....	166,000.00	.....	23,233.59	14,233.59	.....
700,000	7				1st	.....	Laurens (S. C.) R.R.	.....	32	300,000.00	.....	50,224.71	14,149.13	\$4,000
50,000	7				2d	.....	Louisville & Nashville	.....	184	2,697,090.00	.....	587,236.57	162,277.50	10 pr. ct.
700,000	7				1st	.....	Lowell & Lawrence	.....	12 35	300,000.00	.....	.....	.....	.....
					2d	.....	Mad River & Lake Erie...	.....	.....	2,697,090.00	.....	.....	.....	.....
218,000	7			1866	1st	.....	Manchester & Lawrence	.....	26	1,000,000.00	.....	.....	.....	\$24,000
1,000,000	7			1875	1st	.....	Marietta & Cincinnati...	.....	.....	.....	.....	.....	.....	.....
1,000,000	6			1868	1st	.....	Mexican Gulf R.R.	.....	27	10,000,000.00	.....	263,498.96	162,862.24	7 pr. ct.
2,000,000	7			1874	1st mortgage.	.....	Milwaukee & Horicon...	.....	30	600,000.00	.....	193,752.42	53,501.74	7 pr. ct.
2,000,000	7			1881	1st	.....	Mineral Point R.R.	.....	32	922,500.00	.....	7,707,348	3,609,481	2 pr. ct. 6m
60,000	7 and 8			1868	2d	.....	New Haven & Northm'tn	.....	55	23,067,400	14,763,867	7,707,348	3,609,481	3 pr. ct. 6m
420,000	8			1884	1st	.....	New York Central...	.....	555	.....	.....	1,040,593.26	61,678.71	\$37,692.30
320,000	8			1873	1st mortgage.	.....	N. Y. & Harlem R.R.	.....	123	5,717,100.00	.....	245,713.00	51,544.40	.....
320,000	6			1863	2d	.....	N. Y., Prov. & Boston...	.....	50	1,58,000.00	.....	120,571.50	.....	\$25,000
6,000,000	6			1863	1st	.....	N. Lon., William'tn & Pal.	.....	66	1,700,000.00	.....	.....	.....	.....
					2d	.....	Pontchartrain R.R.	.....	6	600,000.00	.....	116,795.00	366,118.80	7 pr. ct.
500,000	7			1873	1st mortgage.	.....	N. O., Opelousa & Grt. West.	.....	62 1/2	3,000,000.00	.....	1,007,666.48	.....	.....
8,356,000	6			1873	2d	.....	N. Y. & New Haven...	.....	103 1/2	.....	.....	600,000.00	25,176.74	7 pr. ct.
32,892,600	6			1885	3d	.....	North Western Va. R.R.	.....	.....	.....	.....	88,458.56	2 1/2 pr. ct.	.....
1,000,000	7			1859	1st mortgage.	.....	Northern (N. Y.) R.R.	.....	118	2,000,000.00	.....	304,236.33	.....	.....
936,000	7			1877	1st	.....	North Missouri R. R.	.....	19 2	2,111,500.00	.....	289,690.10	137,875.93	5 pr. ct.
411,700	6			1860	2d	.....	Norwich & Worcester RR	.....	.....	.....	.....	276,639.62	.....	.....
500,000	7			1866	1st mortgage.	.....	Ogd'nsh'g, Clay'tn & Rome	.....	94	2,957,500.00	.....	.....	.....	.....
300,000	7			1875	2d mortgage.	.....	Ontario, Simcoe & Huron	.....	88 3	1,500,000.00	.....	.....	.....	.....
300,000	8			1868	1st mortgage.	.....	Orange & Alexandria R.R.	.....	.....	.....	.....	.....	.....	.....
				1872	1st	.....	Peoria & Bureau Val. R.R.	.....	47	1,000,000.00	.....	.....	.....	.....
350,000	6			1861	1st mortgage.	.....	Philadelphia & Trenton...	.....	28 1-5	1,000,000.00	.....	.....	.....	.....
800,000	7			1864 to 1874	1st	.....	Potomac & Watertown...	.....	76	2,000,000.00	.....	68,525.42	.....	6 pr. ct.
1,260,000	8			20 years.	1st mortgage.	.....	Rutland & Washington...	.....	62 1/2	950,000.00	.....	.....	.....	.....
					1st	.....	St. Louis & Iron Moun. R.R.	.....	86	6,000,000.00	.....	.....	.....	.....
500,000	6				1st mortgage.	.....	Salem & St. Louis R.R.	.....	108 3/4	400,000.00	.....	19,050.64	.....	.....
250,000	8				2d	.....	Snd'sky Mans'fd & Newk	.....	116	500,000.00	.....	75,246.06	17,378.08	11m. 12 pr. ct
317,000	7				1st mortgage.	.....	Sullivan Railroad...	.....	26	.....	.....	39,586.44	.....	.....
300,000	7			1801	1st mortgage.	.....	Tennessee & Alabama...	.....	145	1,294,450.00	.....	.....	.....	.....
198,000	7			1840	2d	.....	Terre Haute & Richmond	.....	73	1,000,000.00	.....	.....	.....	.....
262,000	7			1875	3d	.....	Toledo, Wabash & Western	.....	242	.....	.....	.....	.....	.....
2,500,000					1st, 2d, 3d	.....	Troy & Boston...	.....	.....	.....	.....	.....	.....	.....
506,000	7				1st mortgage.	.....	Vicksburg & Jackson...	.....	46	3,000,000.00	.....	322,048.60	165,076.04	2 pr. ct.
900,000	7				2d	.....	Virginia & Tennessee...	.....	215	165,000.00	.....	.....	.....	.....
					1st mortgage.	.....	Westchester (Pa.) R.R.	.....	31	.....	.....	.....	.....	.....
					2d	.....	Wilmington & Manchester	.....	171	.....	.....	.....	.....	.....
						.....	Winchester & Potomac...	.....	32	.....	.....	.....	.....	.....
						.....	Worcester & Nashua...	.....	45 69	.....	.....	.....	.....	.....



## INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



### INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

#### THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galosburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattson, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

### VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

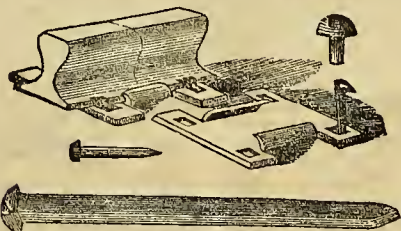
Also corner Front & Broadway, opp. Spencer House, E. B. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

### GREAT WESTERN

## Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.  
feb 28 CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

### VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855. [Jan-ly] Agent.

### APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,

43 Main St. Cincinnati, O.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

## SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

## Norris' Locomotive Works.



### PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY. Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27. RICHARD NORRIS & SON.

## Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—JAMES H. MORLEY, New York City. Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

### RHINELANDER, BOORMAN & CO.,

## RAILWAY AGENTS

AND

## COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

### Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-ly

## Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.  
No. 228 H Street, Washington, D. C. april2

## W. G. HYNDMAN'S



## Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

### THOMAS D. STETSON,

## Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

## RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,  
feb5-1f 10 Wall st., near Broadway, New York.

## ALLEN & NOYES' METALLIC PACKING.

## To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

iy23-1m

## D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,  
Box 1531, Cleveland, Ohio.

oct29-6m

## T. F. RANDOLPH & BRO. Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,

CINCINNATI, O.



## Most Direct Route to the East.

# BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

### ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

### THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

### Fare as Low as by any other Route.

#### FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FREIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

jun10 Office, Adams Express Co., Third street.

## Terre Haute & Richmond R. R.



### Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

#### MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

#### EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute & Richmond R. R.

## PAGE'S

### PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE & LEAVITT.

## LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

#### FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

#### FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office south-east corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

#### THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL further notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE.—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS.—At 6 A. M., and 2:30 P. M.  
FOR LAWRENCEBURG AND AURORA.—At 5:45 P. M.

Freight.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

Office No. 2 Burnet House.

'an2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,

Jan8 1y

119 Walnut st., Odd Fellows' Buildn

## 1857. Summer Arrangement. 1857 Cincinnati, Hamilton & Dayton [TRUNK LINE.]

## RAILROAD, FOR THE NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

THROUGH TICKETS FOR PITTSBURGH, INDIANAPOLIS, PHILADELPHIA, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPOUT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

### SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamers Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

### "STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

### FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

### ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

#### RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:30 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

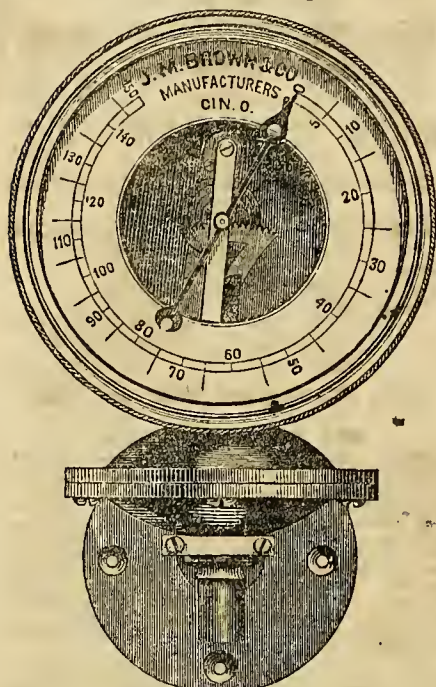
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



J. M. BROWN &amp; CO.,

M S OF



### IMPROVED Corrugated Steel Spring Gauges,

FOR

LOCOMOTIVES AND STATIONARY ENGINES.

THIS Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & Co.,  
250 East Front street, Cincinnati, O.



### Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
DRILL THE TUBE-PLATES

and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes, Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pull Lever Wrenches and Wrought on Blacksmiths' Tynes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

THOMAS PROSSER & SON,  
82 PLATT STREET, New York.

## The Great Arnold Secret Discovered at Last

### BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. RECORD.—For Ledgers and Records only. MERCANTILE.—For Books, Letters, and General purposes. COPYING.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

Transportation Office, Cincinnati, Hamilton & Dayton Railroad.  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

### LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,  
NEW YORK.

JOHN W. KELLY,  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

### RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,  
JUDSON'S GOVERNOR VALVE.

Orders solicited and promptly filled.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, FEBRUARY 4, 1858.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.  
By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion	.....	\$1 00
“ “ per month	.....	3 00
“ “ six months	.....	12 00
“ “ per annum	.....	20 00
One column, single insertion	.....	4 00
“ “ per month	.....	10 00
“ “ six months	.....	40 00
“ “ per annum	.....	80 00
One page, single insertion	.....	10 00
“ “ per month	.....	25 00
“ “ six months	.....	110 00
“ “ per annum	.....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 50.

#### EDITORIAL.

Statistics of Ohio—Auditor's Report.....	733
New York Central R. R.....	733
Marietta & Cincinnati R. R.....	734
Redfield's Railway Law.....	735
Kentucky.....	735
North Pennsylvania R. R.....	735

#### RAILROADS.

Port Royal R. R.....	736
Hartford, Providence & Fishkill R. R.....	736
Chesler Valley R. R., Pa.....	735

#### MISCELLANEOUS.

Proposed line of steamers from Baltimore to the West India Islands.....	736
New York Central—Letter from the President.....	737
The Pacific Railway recommended by the President	738
Hank Act—Georgia.....	739
Revenue of English Railways in 1837.....	739
MONEY AND STOCKS.....	740

**RAILROAD CAR FINDINGS AND SUPPLY DEPOT.**—Our readers will find in its proper place the advertisement of Messrs. A. Bridges & Co., successors to Bridges & Bro., the old and well known Railroad Commission Merchants. They occupy the old stand No. 64 Courtlandt St., New York, and we would say to our friends they may confidently entrust their orders to Messrs. A. Bridges & Co., and be assured their wants will be promptly attended to. Mr. Bridges is well posted as to the requirements of railroads as a practical builder. His long experience both in the practical construction of railroad machinery and rolling stock, and as a dealer in the various articles of consumption on roads, is a guarantee that what he furnishes will be adapted to the purpose.

**DE BOW'S WEEKLY PRESS.**—This is the name of a new weekly paper published in Washington City by the well known editor of De Bow's Review. The Press is devoted to light literature, political information, and news, and is well worthy the support which it will undoubtedly receive.

### STATISTICS OF OHIO—AUDITOR'S REPORT.

The Annual Report of the State Auditor is always an interesting document. Although touching only on such branches of Statistics, as are incidental to the taxing and financial departments of the State; yet, they give us no little insight into the productive industry of the people, and the regular development of our resources. Happily for the people, prosperity has attended all departments of life, and thus the record is one pleasing to contemplate.

Beginning with the valuation of property, we have, for 1857, these results, viz :

Value of Lands.....	\$435,614,676
“ of Town Lots.....	150,006,006
“ of Personals.....	263,793,497
Total Value.....	\$849,414,179

This valuation is much below the truth. Full twenty per cent. should be added for the market value; so that the entire property of the State is fully equal to *one thousand millions of dollars.*

On this vast property is levied \$8,673,298 of taxes—equal to near nine mills on the actual value, and a little more than one per cent on the assessed value. Of this tax about \$2,500,000 are levied for schools; a fact highly honorable to the good sense and liberality of the people.

As this *eight millions of dollars* is chiefly raised in the months of November and December, it will account, in no small degree, for the heavy pressure felt at that season for money.

Of the entire amount of taxes raised in the State of Ohio, \$1,656,174, or *one-fifth* is raised in the County of Hamilton! And \$500,000 are paid by the County of Cuyahoga. Thus, \$2,156,000 are levied as taxes in two counties! It is true, that the largest part of this great sum is raised by *local* authorities; but, we presume, each man finds it just as hard to pay a given sum, no matter who levies it.

The next subject of interest is the number and kinds of animals. The Auditor states these thus :

	No.	Value.
Horses.....	630,659.....	\$29,409,890
Cattle.....	1,655,415.....	21,662,223
Mules.....	6,742.....	485,621
Sheep.....	3,276,539.....	5,357,275
Hogs.....	2,331,778.....	6,772,470

Here are eight and a half millions of animals in a State with two and a half millions of people. The proportion of animals to population is much larger than in any of the countries of Europe; but, will certainly diminish as population and manufactures increase. Animals, by consuming large amounts of vegetable food, interfere directly with human beings, when population becomes dense. It might be said that men need animal food, and, therefore, it is just as cheap to feed animals on vegetable food, as men. It is not so. Animals waste an immense amount of food, and require a great deal of ground for that which is suited to them. Millions of acres

are used for grass, which might be used for wheat. Practically this regulates itself. The western pioneer keeps his hundred of hogs, feeding themselves on the most of the woods. But the poor Irishman must be contented with a single pig, and the Chinese seldom see one.

Horses are the noblest, and we believe the most profitable of animals for the use of man. The prices of good horses are much higher than cattle, and they are raised at about the same cost, and in the same time.

But our State Auditor not content with hunting up all the animals, invades the ladies' parlors, and counts their pianos! What business has he there? Why, to *tax* them For Music! This is the only real act of barbarism our State has been guilty of. Why not let the young women thum their pianos without seeing a Tax Gatherer! Alas, there is no music in his soul. He is fit for treason, stratagem, and spoils. But, how many pianos have these girls? *Six thousand six hundred and seventy-eight*, says the tax man; and he values them at near a million of dollars! Just imagine a sunset in Summer, with the windows open, and all these girls playing at once! Six thousand pianos going! The whole air is in vibration, and from the blue waters of Lake Erie to the rolling Ohio, we have thum, thum! Sing, sing! Through all the notes of the gamut, musical Ohio, friend of the muses! go on jolly soul, and let the world echo with six thousand pianos, and six thousand girls!

But, not contented with even the ladies' pianos, our Auditor goes into the men's pockets for watches! And he has found no less than 77,770 watches! Nearly eighty thousand people in Ohio carry watches. It is rather curious to find how much people regard *time*, while it is continually passing away!

The bell strikes one! We take no note of time, but by its loss!

Twenty millions of dollars put in watches, when a town clock, at each corner, would cost only a tenth, is a curious expenditure of money. Some persons suppose it is vanity, which induces this expenditure. But, this is a mistake. A watch is a friend and a great convenience. We could not well do without it. Its little hand continually marks the transit of the greater hand, which is moving on the years.

### NEW YORK CENTRAL RAILROAD.

Previous to the recent Annual Election of Directors for this road, a movement was made on the part of some of the New York stockholders to obtain a partial control over the affairs of the Company, and a sensation meeting was got up; speeches made and resolutions passed casting reflections upon the management of the road. A committee was appointed to attend the meeting of stockholders.



ders and otherwise make a demonstration. The committee proceeded to Albany, attended the meeting, found themselves in the minority, and on their return to New York published a pamphlet vindicating their course and casting imputations of unfairness on the management of the road. To this pamphlet the President of the road, Mr. Corning, replies in a letter which will be found in another column. How well or ill founded the charges of the committee of New York stockholders are, we must leave for our readers to judge. We should not have devoted our columns to so lengthy a vindication of the management, had not this movement been dignified by some of our contemporaries as a noble effort on the part of a few honest men to expose a great monopoly—to vindicate the rights of stockholders—to obtain for the owners of property a right to control it—and with other high sounding titles. The *Record* has always advocated the rights and duties of stockholders to protect themselves against any unfair use of their property. It is the great error of our railroad system; but we have also said that Wall Street operators were not the men to control any corporation, and we look with suspicion upon any sensation movements calculated to exert an influence in such circles.

#### MARIETTA AND CINCINNATI RAILROAD.

We give our readers below a circular addressed by Mr. T. W. Powell, the agent of the English bondholders of this Company to the stockholders of the Pennsylvania Railroad Company. Mr. Powell, in his communication, tells a great many true things. And but repeats what the *Record* has often said of the importance of this line of railroad. The time will come when the iron and coal of Southern Ohio, with the slesdy enormous products of the corn crop, every year becoming of greater importance, will make this region second to no other in the U. States in the value of its products and the amount of its exports; and its railroad lines will be the avenues of that vast trade which can have no other outlet. But, while fully endorsing these sentiments, we have no desire to cover or hide the mistakes and errors of the managers of the Marietta & Cincinnati Railroad. We have differed from them in many points of management. And believe now, while repeating our confidence in the natural resources of their line for business, that with the means that were within their command, they should have completed their line to its present terminus free from floating debt, and unembarrassed with the pecuniary troubles that now beset it. Their report of the past year's operations, we have not seen, if any such has been made, but it is due to their stockholders and the public to know the worst. They should make their statement fully and frankly, and should do it at once. Report says they have a sufficient surplus of

rolling stock, for which they have cash offers, to *pay their whole floating debt*. If so, the officers of the company have made a great mistake in providing so much in advance of the necessities of the road, and should not attempt to perpetuate their error to the injury of their creditors.

But to the circular. We do not presume to dictate to the stockholders of the Pennsylvania Railroad, as to the policy which they should pursue. That is something which must be left to their own judgment and discrimination. There can, however, be but one opinion of the value of the Marietta and Cincinnati line, should it ever be completed to the Pennsylvania Railroad. It will be one of its most important tributaries—more important to Philadelphia than to Cincinnati. Had the Marietta Line stopped short of its present terminus, it would still have brought Cincinnati in connection with this rich mineral and agricultural region. If it stops at its present terminus, it will not bring Philadelphia in connection with it. Mr. Powell, in his circular, says:

#### TO THE SHAREHOLDERS OF THE PENNSYLVANIA RAILROAD COMPANY.

GENTLEMEN:—I have been sent over from England, by the holders of the Marietta and Cincinnati Railroad Company's Mortgage Bonds, to watch their interests, and look fully into the affairs of that road, so as to be able to advise them on the best course to be adopted under present circumstances.

I have already made myself generally acquainted with the condition of that Company and its difficulties; but it seems to me, at the very outset, that no other party already concerned in it, is nearly so much interested as yourselves. Your company is the largest shareholder, having 13,000 shares, of \$50 each, in the undertaking. Under your company's auspices, and with its sanction and official introduction, the securities of the Marietta & Cincinnati Company were commended to the English market, and a large number of your fellow-proprietors were thereby induced to invest in them. Your company had a wise and legitimate purpose in the investment; not to put out a sum of money in order to obtain Marietta and Cincinnati dividends, but to open out and control a valuable and productive district of Southern Ohio, and thereby draw a large trade over your line, and to the city of Philadelphia.

Thus far, you have paid your subscription, but your purpose is not attained. The line has been opened in an imperfect fashion, from Cincinnati to the Ohio, near Marietta. So far as it is able to conduct traffic to and from the east at all, it does it by the Baltimore and Ohio line, and your subscription has helped to convey traffic to another railway, (which has not taken the least interest in the Marietta and Cincinnati line) instead of your own. A gap of nine miles exists between Marietta and the Baltimore and Ohio system at Parkersburg. Nearly eighty miles (on which a little grading is done) have yet to be made, to connect Marietta with Belleair, opposite Wheeling; thence a line already exists to Steubenville, which your company will very soon reach by the Pittsburg and Steubenville

line, and the permanent bridge crossing the Ohio at that point.

To you, as the proprietors of about one-fifth part of the whole Marietta and Cincinnati capital stock, and your company, as the indorsers of the *scheme* of the Marietta and Cincinnati Line, and, as far more deeply interested, too, than in the mere risk of the money invested, the bondholders naturally turn *first* to inquire what is to be done at the present juncture.

The Company is in extreme difficulties; interest suspended on all its bonds; some parts of the line very unfinished; the operators of the road and traffic in arrear of wages; and no prospect at all, without further outlay, of interest being earned, for even the first mortgage bonds; and the property is depreciating in value, for want of some vigorous action to make it self-sustaining and remunerative.

Now, the question is, will you take part in the needful effort? Will you look the matter in the face, and take *effectual* steps to control the traffic of Southern Ohio, for which you have already spent so much; or will you decide to give up the road and the district, your former policy, and your money, all together?

It may easily be replied—"The times are bad, we will look on and wait awhile." But bad times are really the true opportunity. If the times were good, you would have to pay much dearer than you need to do now to effect your policy; and there is no certainty that you *can* look on and wait awhile;—other interests adverse to yours may step in if you hesitate to carry out that policy. I can not believe that a road, situated as this is, controlling one-fifth part of the State of Ohio, rich in both minerals and agriculture, and commanding the best part of the Ohio Valley, and in the future the shortest route into Kentucky from the four Great Eastern cities and from Washington, can long remain crippled and without an owner.

As representing, either mediately or immediately, the proprietors of near 20,000 shares in the Pennsylvania Railroad, I can not but feel a deep interest in its policy and administration, and it is in this light that it occurs to me as being very desirable that your system should be pushed down to Marietta, even if there were no Marietta and Cincinnati Railroad in existence. A great mass of your through freight, (and that the most profitable part of it) is dependent on a good state of Ohio navigation; a dry season stops the boats two hundred miles lower down. The Baltimore and Ohio Company originally struck the river one hundred miles below Pittsburgh, and yet they found it desirable, in order to strike a better point 100 miles lower still, to take up a branch line 104 miles long, through a difficult and unsettled country, to Parkersburg, costing near \$5,000,000. Now, if there is wisdom in this policy, and if \$5,000,000 is worth thus spending on its accomplishment, much more would it be wisdom in you, to whom the river traffic is not of less importance, to spend \$1,500,000 (which would now be sufficient) to get down through an easy country, which is neither unsettled nor unproductive, to Marietta—a place as good as Parkersburg for commanding the Ohio river trade, and much better, in that it commands also the trade of the lower half of the Muskingum Valley, a district in itself no mean tributary to nearly five hundred miles of railroad between it and Philadelphia.



But if such an extension be desirable on its merits locally, and to secure river business, how much more so does it become if you can attach to it the control, or the ownership on cheap terms, of a through line to Cincinnati; a line on your own gauge, and through a fine country, of which the monopoly, at paying rates, would probably give you as much *net profit* as the low rated, or further distant, or competed for traffic of a seven times larger area further north or west.

It appears a very sober view of the probable result, in money, of the completion of the policy which I have shadowed out, that you would very soon receive a new well paying traffic on your present line of \$50,000 a month, in addition to the preservation of a large amount of river traffic in dry seasons, which otherwise can not at such times reach you. The first dry summer will, no doubt, show you the practical truth of my argument, if you do not meanwhile obviate the risk by reaching the better navigation. I need hardly remind many of you that this disadvantage, or rather the existence of a superior advantage elsewhere, has a tendency to divert *some* traffic from your route *permanently*.

I have now put the case briefly before you. I ought, perhaps, to dwell on the value of the iron and coal region lying on the river, and on the Marietta and Cincinnati Railroad, west of Marietta; already of great importance and promising a much greater future; but I am unwilling to trouble you with too many words. Suffice it to say, that if an Englishman's observations of the causes that make some parts of his own country busy, smoky, and populous, while other parts merely vegetate, may be taken as a guide for forming an opinion in this country, it will not be very many years before Southern Ohio will be as much courted as it is now neglected by the great Eastern Railroad companies, who hitherto crowd and fight together in a narrow belt Northwards, as if the Southern district of the State were not (as it is) the best part of it as to *natural* wealth, but a barren and impassable lake or desert.

It is well to bear in mind that a district held without competition will probably yield as much *net* revenue to its carrying company, as an area six or seven times larger would yield to one of four competing companies.

The approaching annual meeting of the Pennsylvania Railroad Company gives opportunity for discussing this whole question, and I have, therefore, with the consent of your President, and on behalf of the Marietta and Cincinnati bondholders, (many of whom are *very large* holders of Pennsylvania shares), resolved to put you previously in possession of a general outline of the circumstances on which you ought to express your policy. I do not give any recommendation of details of what should be done; if you decide as to the policy on which you wish to act, your Directors are very well able to devise and execute the best plan of carrying out your instructions. Though your subscription to the stock of the Marietta and Cincinnati Company, as to any chance of obtaining dividends, may be regarded as in jeopardy, or even as lost, regret for that need not paralyze so powerful a company as yours; the course is still open, perhaps more open than ever before, to secure the fruit of that subscription, and if that also be lost, it will probably be only by your own hesitation or apathy.

I am, gentlemen, your obedient servant,

T. W. POWELL.

Girard House, Philadelphia, 20th Jan., 1858.

#### KENTUCKY.

The Legislature of this State has passed a bill which provides that the railroads of that State shall be authorized to make the following contracts with each other.

Contracts for the consolidation of either the management, profits, or stock of any two or more companies, the roads of which are so connected as to form a continuous road.

Contracts for the leasing of the road of one company to another, provided the road so leased shall form a continuous line with the road leasing it.

Contracts for the completion in whole or part of the unfinished road of any company.

Contracts for giving a common name to any continuous road.

Provided that such contracts shall be approved by a majority of all the stockholders of each of the companies at some stated or called meeting.

#### REDFIELD'S RAILWAY LAW.

We are indebted to the publishers, Messrs. Little, Brown & Co., of Boston, for a copy of this work. It will, undoubtedly, soon be found in all the leading book stores of the country. To say that such a work has long been needed, is merely to repeat what every one connected with railroads has long felt. The object of the present work seems to have been to supply the legal profession with a special work embodying the whole law, both English and American, governing the decision of cases which may occur in any department of railroading from the first inception of companies to the various difficulties arising from the working of the finished lines.

The manner in which the work is arranged, is peculiar in some respects; the author having adopted the order of time in which the several functions of railways came into operation. It really contains substantially separate and complete treatises upon corporations, railway construction, common carriers of freight and passengers, the law of master and servant, principal, agent, constitutional questions, tolls, fences, torts to strangers, injuries to domestic animals, railway investments, mandamus, equity, and some others.

Each chapter and subdivision of the work is prefaced by a complete analysis of its contents, referring to Arabic figures on the margin of the several paragraphs where the subdivisions begin. This analysis is placed at the beginning of the work as an analytical index, and it is so thorough and complete, as to enable the reader, in a moment, to turn to any portion he may desire to consult, and to place his eye at once upon the very point in question.

In addition to this there is a very complete and carefully prepared alphabetical index of more than thirty pages, which will still far-

ther aid the researches of any one who may desire to consult the work.

The general principles of all the cases, with the points of decision in the leading cases upon the several topics discussed, are given in the text. The references and the names of cases are given chiefly in the notes. And the subordinate cases, with the points decided, are given in the notes also. And when there is any conflict in the authorities so as to require analysis and comparison, it is thrown into the notes.

A work like this, prepared by one whose opportunities and experience are adequate to the task, can not fail to be appreciated by railroad managers and the legal profession. It must soon be found in every railroad office in our country.

#### NORTH PENNSYLVANIA R. R.

At the Annual meeting of the stockholders of this company held in Philadelphia the Report of the officers showed the gross earnings for the year ending November 30th, were \$248,783.80. The expenses were \$112,186.65, leaving net earnings of \$136,597.15.

The Board contemplates a large increase in the business of the road. The completion of the Quakake Railroad will greatly facilitate the prosperity of the road.

The balance of the ten per cent. coupon bonds authorized by Legislature, is applicable to the purchase of rolling stock and the payment of the floating debt, which, at the date the accounts were made up, amount to \$221,720.89, after deducting available assets amounting to \$16,066.34. The balance of the ten per cent. bonds still on hand amount to \$400,000.

The Board is of opinion that the going into operation of the City Passenger Railroad will supersede the necessity of having a depot located at the Germantown road and Master streets. Passengers can be transported in the cars of the city Passenger Railroad to all parts of the city, and the Company can avoid the expense of hauling the cars over the city portion of the North Pennsylvania Railroad by mules. A substantial telegraph has been erected upon the main line of the road.

The equipment of the road is equal to a business of about \$400,000 per annum. It consists of 16 locomotives; 14 first class passenger cars; 100 8-wheeled coal do.; 218 4-wheeled do. do.; 42 house cars; 54 platform do.; 24 lime do.; 4 8-wheeled dump do.; 50 4-wheeled dump cars used in construction. The whole cost being \$349,279.97.

The following gentlemen were elected as the officers of the company for the coming year.

FRANKLIN A. COMLY—President; John Welsh, John Brock, J. Gillingham Fell, John Jordan, Jr., William C. Ludwig, Algeron S. Roberts, S. Morris Waln, Isaac S. Waterman, Ellwood Shannon, Edward C. Knight, Directors.



## PORT ROYAL R. R.

A Bill has been introduced into the Legislature of South Carolina, for the construction of a railroad from Port Royal, in the neighborhood of Beaufort Harbor to some point on the Savannah River, near the Salcahatchie Bridge. Beaufort Harbor has been long known as one of the best harbors on the whole Atlantic coast of the Southern States. The movement, therefore, toward the establishment of a railroad communication between it and the interior, is one of great importance to the south. The capital stock of the company is put at three million dollars, in shares of twenty-five dollars each, and the company may be organized when two hundred and fifty thousand dollars have been subscribed.

## HARTFORD, PROVIDENCE &amp; FISHKILL R. R.

This company having failed to pay the interest on its bonds, and the President of the road, who is also one of the firm of A. & W. Sprague, to whom the Company is largely indebted, having issued an attachment against the road to secure its indebtedness to their firm, the Council of the City of Providence appointed a committee to examine into the affairs of the road. The following is their statement of its condition :

HARTFORD, PROVIDENCE AND FISKILL R. R.	
Amount of old stock issued and sold.....	\$1,542,539 96
Amount of preferred stock sold.....	\$398,600
Amount of preferred stock pledged.....	101,200
	500,000 00
Whole amount of stock.....	\$2,042,539 96
Whole amount of Bonds issued.....	2,107,730 00
Of which are pledged to A. & W. Sprague.....	\$197,000
" " Charter Oak Bank.....	8,000
" " City of Providence.....	6,000
	211,000 00
Amount of bonds sold is.....	\$1,897,730 00
Of the above amount of bonds issued, there are under the Connecticut mortgage.....	\$1,636,730 00
Under the Rhode Island mortgage.....	481,000 00
The whole length of the road is 122 72 100 miles. Of which there are in Rhode Island 26 32-100 miles.	
Actual cost of road, as per statement of the Chief Engineer, \$902,174.	
Bonds issued on the same, (all held by the City of Providence,) \$481,000.	
Length of road in State of Connecticut, 96, 40, 100 miles.	
Actual cost of the road and all the equipments, as per Chief Engineer's statement, \$3,254,576.	
Bonds issued on the same, \$4,126,730.	
Amount of floating debt unsecured.....	\$ 35,775 39
Amount of floating debt due Charter Oak Bank.....	5,500 00
Amount floating balance account due A. & W. Sprague.....	79,200 00
Notes of Co. endorsed by A. & W. Sprague.....	172,000 00
Total.....	\$292,475 39
Amount of supplies, wood and other materials on hand, as per annual report, Oct. 1, 1857, \$22,076.	
Receipts for the year ending Sept. 30, 1857.....	\$338,738
Expenditures, operating expenses road, \$201,732	
Other expenses, relaying and renewing superstructure, loss and damage on freight, injury to persons and cattle, insurance, taxes, &c.....	25,138
	226,870
Net earnings.....	\$141,668
Receipts for Oct., 1857, as near as can be ascertained.....	\$20,000
Receipts for Nov., 1857.....	18,000
Receipts for Dec., 1857.....	16,000

The mortgage in Rhode Island covers only the real estate, iron, depots, &c., in that State, and no other persons have any security under it, excepting the city of Providence.

The mortgage in Connecticut covers all the real estate, iron, depots, &c., in that State, and also the entire equipment of the road, and all the personal property of the Company.

The city of Providence hold \$19,000 of these bonds, and also \$6,000 as security for the performance of the contract made by the Company in regard to the filling in the Cove and lands adjacent to their depot grounds.

## CHESTER VALLEY RAILROAD, PA.

At the annual meeting of the stockholders of the Chester Valley Railroad, the reports of the officers gave the following statement of the affairs of the road :

The receipts for the year 1857, were.....	\$26,621 38
Expenses.....	18,124 03
Net.....	\$7,497 35

The company pay the Germantown Railroad Company seventy cents per mile per train, for doing the business of the road.

There have been carried over the road during the past four years, as follows :

	Merchandise.	Coal.
Total in 1857.....	29,481 10	10,629 03
" 1856.....	36,575 10	10,964 04
" 1855.....	18,968 07	9,369 04
" 1854.....	12,540 13	5,882 05
During 1857, Milk.....	134,014 gallons.	

It was further stated that during the four years and four months the road has been in operation, upwards of 128,000 passengers have been carried over it, and that not a single case of accident to a single passenger has occurred.

## PROPOSED LINE OF STEAMERS FROM BALTIMORE TO THE WEST INDIA ISLANDS.

A petition signed by many of the leading merchants and others of the city of Baltimore has been presented to Congress for the establishment of a United States Mail Line of Steamers from that city to St. Thomas, thence to connect with the English Mail line plying from England to the various ports in the West Indies. The petition prays for the establishment of a great United States mail route from the United States to the West Indies, say from the City of Baltimore, in the State of Maryland, to St. Thomas, via., each way to the Island of Bermuda. And also the great advantages to be derived by our merchants and the entire business community by the connection which would be made at St. Thomas with the English Royal Mail Steamers, plying from England to St. Thomas, thence to the Islands of Porto Rico, St. Domingo, Jamaica, Cuba, and Vera Cruz, in Mexico, and from thence back to St. Thomas, touching at all intermediate ports, and from St. Thomas to the Windward Islands via. the Islands of Antigua, Guadaloupe, Dominico, Martinique, St. Lucia, St. Vincent, Granada, Trinidad, Barbadoes and Demerara, in British Guiana; and returning to St. Thomas, touching at all of the above mentioned ports

twice a month; and from St. Thomas to Porto Cabello and Laguayra in the province of Venezuela, and returning thence to St. Thomas.

Your honorable bodies will perceive that the route which I suggest forms a perfect chain with all of the West India Islands, British Guiana, Venezuela and Mexico; and that St. Thomas is the central depot for all of the English Mail Steamers to the ports and places above mentioned to and from England. Thus the United States Mails leaving Baltimore, would connect with the British Mail Steamers at St. Thomas, and from thence be distributed by steam power 2,000 miles from North to South, and 1,800 from East to West, which would make the route from Baltimore to St. Thomas and Bermuda one of the most important mail routes from any of our Atlantic cities.

The importance of this line is shown by the petitioners in the fact that the trade of the city of Baltimore with the various ports to be brought into communication with it by this route for the year ending June 30, 1857, was :

Exports.....	\$2,582,867.
Imports.....	4,106,451.

The advantages of the city of Baltimore are thus stated.

Baltimore holds the central position of our great nation, and is the nearest to its capital, having railroads connecting with the British American provinces. Also her Central road runs to the Lakes through our State. Her Western roads ends in the great valley of the Mississippi, and South-west to Memphis, Tennessee. Bounded as she is by rich and populous States, and situated near the head waters of one of the most magnificent Bays in the world, its navigation free from any impediment whatever, and its waters dotted by her large and prosperous foreign and coasting trade, and being nearer the centre of the central group of the West India Islands than any of our Atlantic cities.

By the present route through New York it requires forty days to communicate with the West Indies. By the proposed route this time would be reduced to thirty.

There can be no question but that advantage should be taken of the position of some of our more healthy and important Southern cities to shorten the time necessary for the carriage of the mails both to the West Indies and to California. The immense importance to all the business interests of the country of a speedy communication with the latter invests this subject with great importance. We trust that the claims of the petitioners will be well considered.

CLEVELAND AND PITTSBURG R. R. Co.—At the annual meeting of the stockholders of the Cleveland and Pittsburg Railroad Company, held at Cleveland on the 6th inst., James S. Craft, Esq., of Pittsburg, presiding, a new Board of Directors was elected, headed by James Farmer, by the votes of the New York stockholders, except J. Fitch on the western



ticket. Hiram Stowe and Willism M. Lyon, were elected as the Pennsylvania Directors.

The report of the Compsny exhibits:

Stocks.....	\$4,032,878 81
Bonds.....	4,925,462 00
Bills payable and coupons.....	742,300 00
Stock script.....	84,605 00
Total.....	\$9,778,461 81,
Construction equipment.....	\$9,442,009 88
Bank of Massillon.....	36,000 00
Bills receivable.....	18,292 12
Cash.....	16,375 66
Sundries.....	265,484 13
Total.....	\$9,773,461 81

CLEVELAND AND PITTSBURG R. R.—The following gentlemen have been elected officers of this company for the current year:

J. Farmer, *Pres. and Superintendent*; E. Rockwell, *Secretary*; J. Hovey, *Master Machinist*; W. W. Chandler, *General Freight Agent*; F. R. Myers, *General Ticket Agent*; R. F. Smith, *Paymaster*; J. Farmer, J. F. Clark, Z. Fitch, H. Rice, J. N. McCullough, *Ex. Committee*.

James Farmer, Cleveland; Henry. W. Clark, do.; James F. Clark, do.; Hsvey Rice, do.; Zalmon Fitch, do.; James Turnbull, Steubenville; J. Nessly McCullough, Wellsville; W. W. Holloway, Bridgeport; Dsniel C. List, Wheeling; W. M. Lyon, Pittsburgh; Hiram Store, Beaver; Henry C. Kingsley, New Haven, Ct.

LA CROSS AND MILWAUKEE R. R.—The aggregate net earnings of this road for the quarter ending December 31, 1857, was \$70,421 82. The road is worked under a lesse to the contractor of the western division. There are about 150 miles of track laid. The quarterly statement is:

	Gross Earnings.	Expenses.	Profit.
October.....	\$46,352 18	\$14,781 89	\$30,570 29
November.....	38,476 52	13,776 30	24,693 22
December.....	28,876 92	13,723 61	15,153 31
Total.....	\$113,705 62	\$43,283 80	\$70,421 82

PITTSBURGH, MAYSVILLE AND CINCINNATI R. R.—The annual meeting of the stockholders of this Company will take place on Tuesday, March 2, at McConnellsville, O.

CHICAGO AND MILWAUKEE R. R.—The Annual Report of the Chicago and Milwaukee Railroad Compsny states that the gross earnings for the year ending

Nov. 1st, were.....	\$265,745 21
Expenses.....	121,395 16
Net earnings.....	\$174,420 27

The net surplus of the income account is \$94,213 33. The floating debt is \$215,103, in addition to which there are dividend certificates outstanding to the amount of \$115,435. The cost of the road has been \$2,010,251 64, including \$150,000 invested in steamboats. The stock is \$988,500. First mortgage bonds, \$512,000; income bonds, \$80,000. The managers recommend that all the earnings be employed in paying the floating debt.

## NEW YORK CENTRAL—LETTER FROM THE PRESIDENT.

To the Stockholders of the New York Central Railroad Company:

The recent publication of a "Report of the Committee of seven stockholders of the New York Central Railroad Company, appointed 25th November, 1857, to their associate stockholders," a large part of which relates to the circumstances attending the last election of Directors of the Company, and the part I took in it, is the cause of my addressing you. I should have done so before, but various circumstances, and chiefly the engagements consequent upon my leaving home for some time, have caused the delay. It may be proper in the outset to remark, in reference to the meeting at which the Committee was appointed, that it was held, as I learn, under an anonymous call in the newspapers; that of perhaps twelve or fifteen hundred stockholders residing in New York and its vicinity, but thirty or forty attended; and that several of those did so to ascertain the object of the meeting, and not from any feeling of dissatisfaction with the management of the road. I state these facts with no intention to detract from the character of the meeting, or the consideration due to its action, but that parties at a distance not informed as to the circumstances may properly estimate the true extent of the movement.

In noticing the report, I shall avoid minor points as far as possible, and only advert to its principal features. At the interview between the Committee and myself on the evening before the election, which is referred to in the report, when they had stated their wish to place the name of Mr. Mann of Utica on the ticket as a Director in place of Mr. Spraker, I remarked that I entirely concurred with them as to Mr. Mann's fitness for the office, and as an evidence of it, that I had previously to the then last election expressed my wish to support him for a seat at the Board, but that he had declined to have his name used, and that Mr. Spraker had thereupon been elected. That Mr. S., being possessed of very considerable railroad experience, acquired while a Director for several years of the Utica and Schenectady Railroad, and having proved to be an efficient and valuable member of the Board, I could not, under such circumstances, consent to his removal, but should again support him; to which one of the Committee replied, "And elect him, if you can." The tone of this remark clearly implied, that the gentleman who made it considered that the control of the election rested with him and his friends, a point which I certainly was not prepared to dispute. Another member of the Committee, however, remarked that they had no personal objection to Mr. Spraker; that the question of residence only had been considered, which did not on inquiry seem to be so material as they had supposed, and that it was quite probable they might conclude to support him. They, however, did not, and Mr. S. was elected on the ticket which received my vote, and I confidently submit that my course was fully justified by the circumstances. I say this without the least disparagement to Mr. Mann, who well knows that I entertain a high respect for his character. Mr. Dehon, the Chairman of the Committee, is reported by the press as having stated, at the meeting at Albany, that he was willing to leave the matter open, and that stockholders might vote for Mr. Spraker or Mr. Mann, as they saw fit. This certainly was considerate on his part, but how he could afterward take exception to Mr. Spraker's election, I do not understand.

The Committee admit that they informed me that they were empowered to change names on the ticket agreed upon at New York. As the only other change they proposed to the direction was to substitute Mr. Moore, one of their number, in place of Mr. Faile, who declined a reelection, I had a right to infer that they did not

intend to insist upon the use of Mr. Moore's name. My object in referring to this will presently appear. A proposal was made and assented to after some discussion of the subject, that I should meet the Committee for a final conference in regard to the ticket, at the Company's office, at nine o'clock the next morning. I attended at the time and place named, but none of the Committee appeared. Mr. Livingston came to the office somewhat past ten; Mr. Dehon and the other gentlemen not till about half-past eleven. Mr. Delano, one of their number, admitted that he had understood the appointment to be for nine o'clock, and had so informed his associates; but it seems they had preferred first going to a meeting of certain of the stockholders at the City Hall. As the election was noticed for 11 o'clock, I therefore only had the opportunity of consulting with Mr. Livingston. It is due to him to say that he declared his intention to vote for Mr. Moore, and spoke favorably of him; but on being asked his opinion as to the propriety of putting Mr. Wolfe's name on the ticket instead of Mr. Moore's, frankly admitted that Mr. Wolfe, from his well-known character, high standing, and the large interest he and his relatives held in the road, would be a most desirable Director; that no exception could be taken to his selection; that he was his (Mr. Livingston's) first choice, and would have been nominated in New York, had it not been understood that he would decline the offer. Having, however, been informed by a friend of Mr. Wolfe, on whose opinion I placed great reliance, that his belief was that Mr. Wolfe would, if elected, be induced to comply with the wishes of his friends and consent to serve, I so informed Mr. Livingston, and that I intended to vote for him.

It was under these circumstances that Mr. Wolfe was elected a Director of the Company.

It may be well to say, in reference to the general conversation at my house, as to the action of the New York meeting, to which the Committee have deemed it proper to refer, that Mr. Pruyn, who had a copy of the newspaper report of the proceedings in his possession, at my request, read the resolutions. Mr. Dehon, who mainly conducted the interview on the part of the Committee, as resolution after resolution was read and commented upon, claimed that the report was incorrect, and that his remarks relative to the market value of the securities of the Company which were referred to, had also been incorrectly reported. I had, therefore, expected to see an entire different version of the proceedings from that given by the press; but, on comparing the reported resolutions in print with those in manuscript sent to the office of the Company some days subsequently, certified by the officers of the meeting, I am at a loss to perceive any substantial difference between them. The resolutions, therefore, stand with all their unfair and objectionable features.

The Committee have chosen to comment upon several facts in regard to the management of the road, as to some of which they admit their ignorance, and as to none of which do they seem to claim any positive knowledge. I do not now propose, nor do I deem it necessary, to go into any detailed examination of these matters. The Committee well knew that they could have had full information in regard to them, had they chosen to apply for it at the Company's office, in which event, I do not hesitate to say that as candid men, they would not have ventured upon the insinuations and charges which they have made. The amount of confidence to be placed in a report made under such circumstances I leave to others to determine.

The Committee have been called upon for the particulars as to the alleged fraud in the wood department. They have already, I learn, disclaimed any application of the charge to the department as at present organized, which organization has been in full operation since September,



1856. But specific information has been asked for. Proper inquiry, I do not hesitate to say, will show how little foundation there was for the charge, and how carelessly it was made.

There are other points in the report which I might notice, but a recent very candid and able review, which has been published by several papers, of the statements it contains as to the proceedings of the Albany meeting of stockholders, and of its remarks on the proxy system, written by a stockholder who attended the meeting, renders it unnecessary for me to say anything on those subjects. I may, however, remark, in reference to the proxy system, with which the Committee seem to be so much dissatisfied, that it is one founded on the simple and sound principle that where a party can not attend to his own business in person, he shall be at liberty to protect his interests by selecting his own agent for the purpose. I had supposed that in a great commercial metropolis like New York, in which such large interests, especially foreign interests, are constantly represented by agents, that the soundness of this rule was universally recognized. But it seems not; and that while the Committee think it quite right that they should receive proxies and act under them, that others who happen to be Directors of the Company and better acquainted with its affairs, should be shut out from the confidence of their associates, and be debarred of the rights which other stockholders enjoy.

The doctrine, fully carried out, would prohibit Directors from voting; and although they might, as in many corporations they do, own a majority of the stock, the minority would be left to govern.

I leave the subject with the simple expression of the hope that hereafter, as heretofore, each stockholder will be left to act in this matter as he sees fit. Notwithstanding the evident doubts of the Committee, I think they will be found quite capable of taking care of their own interests in their own way.

The practical recommendation with which the report closes is "that outstanding and extant proxies, applicable to future elections, should be abrogated and annulled by those who have given them." This fairly implies that such proxies exist, and have been used, especially by some of the Directors. Now the Committee well knew, or they might have known, had they chosen to inquire, that the proxies uniformly used at the elections have been *annual proxies*, and good only for the election at which they were used, with the single exception, as far as I can learn, which I will presently mention. All those voted on by the Committee had been sent from the Company's office to the stockholders, and were of this form; and I can not imagine how the Committee could have had any good reason to believe that permanent proxies were or ever had been used. The exception referred to is in the case of Mr. Livingston, one of the Committee, who, as the representative of a gentleman residing abroad, having a very large interest in the Company, has uniformly voted under a permanent power given by his principal—the only case, I believe, of the kind. He voted in this manner at the recent election, and was the only person who did so. The recommendation of the Committee can, therefore, be very easily carried into full practical effect, as it rests entirely with one of their own number to do it.

The New York Central Railroad is one of the few great lines of the country which has gone through the late troubles with its credit unimpaired, and all its engagements promptly and honorably met. From the outset I have been largely interested in it as a stockholder, as I was for some twenty years previously in the Utica and Schenectady Road, and other roads forming part of the present lines, and having faith in its future prosperity, that interest remains undiminished. While the attacks made

upon the road in various quarters for some time past, may have a temporary effect with some persons, I trust that the great body of the stockholders will not be influenced by them. The future will, I hope, demonstrate the value of their property, if the past has not already proved it to their satisfaction. Time will show the unfairness of these attacks, and I doubt not the personal motives and private objects which have induced the most of them.

ERASTUS CORNING.

January 20, 1858.

#### THE PACIFIC RAILWAY RECOMMENDED BY THE PRESIDENT—ITS EFFECTS ON ENGLAND'S EASTERN TRADE.

Almost from the time of the discovery of America—almost from that day when Nunez de Bilboa first caught a glimpse of the great South Sea—various projects have been formed for the purpose of effecting an easy communication between the Atlantic and Pacific Oceans. But ages passed, and during those periods the Spaniard, the foreign lord of the soil, with the listlessness of his race, paid little attention to any measure which would have developed the material prosperity of the fertile regions which he had conquered by the sword. When the transatlantic empire of Spain had passed from the sovereignty of the Most Catholic King; when its place had been supplied by the weak and inefficient dominion of various independent republics, the mixed Spanish and Creole population had neither the means nor the inclination to provide those facilities for commerce which would have increased their wealth and given solidity to their national power. The enterprise and energy of the Anglo-Saxon race have, however, been brought to bear upon that great and important isthmus which is occupied by the republican States of Central America. The Panama Railroad has now for some years united the two oceans, and farther to the north a wealthy Anglo-American company is engaged in the construction of an inter-oceanic railway between Porto Cabellos and the Bay of Fonseca. The importance of these communications in reference to the trade of California, Australia, and the island of the Pacific, it is impossible to estimate too highly; and when the disputes which have arisen between England and the United States on the subject of Central America shall have received a just and honorable settlement, we have a confident belief that European and North American capital and enterprise will be largely applied to promote the internal improvement of every portion of these most interesting and valuable regions.

The message recently communicated to Congress by the President of the United States recommends the construction of a railroad across the Continent for the purposes of military defence. The line suggested by Mr. Buchanan will pass through some of the newly acquired territories of the United States to the seaboard of the Pacific. Mr. Buchanan adds that the difficulties connected with an undertaking of this description have been greatly exaggerated, and that by a wise expenditure of public money, assisted by private enterprise and free grants of land, this line, of so much importance on military as well as commercial grounds, might at some distant day be completed. Here we may mention that some years ago an American citizen proposed the construction of another line stretching from Lake Michigan, between which lake and New York there is already steam communication, and proceeding thence through the far West to California. The

projector of this scheme asked for no grant of public money, but merely that thirty miles of the waste lands on either side of the proposed road should be conceded to the company to enable them to accomplish this gigantic work. Mr. Whitney's scheme although it received the sanction of many separate States, still remains in that category of useful projects which from their magnitude and expensive character are favorably considered, whilst they are rarely, if ever, carried into execution. We do not intend to institute any comparison between the two routes which have been suggested by Mr. Buchanan and by Mr. Whitney. But it must be obvious to the most superficial understanding that the opening of any inter-oceanic line through the territory of the United States would effect as great a revolution in the trade of the world as that which was brought about by the discovery of the Cape of Good Hope route to India and to the other countries of the East. The trade of China, Japan, and of regions comparatively unknown, would be impelled to the Pacific terminus of the railroad, whence it would be carried to the great Atlantic ports, to be afterward distributed over America and Europe. Hong Kong, Shanghai, Canton, and the other marts of Chinese trade would be brought by steam within a few days' distance of the great American emporium which would spring up on the coast of the Pacific.

If a facility of this kind existed, the most important and lucrative trade in the world would fall into the hands of the people of the United States, and the long voyages round the Cape, or round the Horn, would rarely be undertaken for any purpose of commercial gain. Whilst the citizens and the government of the United States are perfectly alive to the advantages which their country would derive from the possession of this great "highway of nations" the merchant princes and the rich capitalists of England appear almost to have forgotten that in British North America there exist vast regions admirably adapted for the construction of a railway, by means of which England could, as at present, defy the competition of the world. The position of British North America is peculiarly favorable both as regards physical geography and means of water communication. The distance between the north west point of Lake Superior and the Straits of Fuca on the Pacific is estimated not to exceed sixteen or eighteen hundred miles—just double the length of the great Trunk Railway of Canada. From the recent investigations of Professor Palliser, it appears that large portions of the territory through which the line would pass consist of level prairie lands, and that the most formidable difficulty which the projectors of such an undertaking would have to encounter would be the discovery of some pass or gorge in the Rocky Mountains permitting the construction of a railway. But no one can hold such an obstacle to be insuperable when on the same continent the science of a Stephenson has spanned, by a bridge of two miles in length the waters of the mighty St. Lawrence. In 1851 the scheme of which we have given an outline was submitted to the Legislature of Canada, by a gentleman of the name of Allen Macdonald. The scheme was rejected by a committee, on the technical ground that the projector had not obtained the necessary capital, but the report distinctly stated that the construction of such a railroad was not only desirable, but practicable, and that it ought at some future time to be undertaken. If the Grand Trunk Railway were continued to



Halifax, the route up to the lakes would be completed from a British port accessible throughout the year. The construction of a railway running to the north-west of Lake Superior and onwards to the Pacific would terminate the line. The expenses of this undertaking have been estimated at ten or twelve millions—a sum insignificant when compared with the profits of that stream of wealth which would flow from the east through British territory to Britain herself. The abolition of the Hudson's Bay monopoly and the constitution of Vancouver's Island as a British colony will attract hardy and enterprising settlers to the hitherto neglected regions bordering upon the North Pacific, and whether or not the formation of this great inter-oceanic communication be speedily undertaken, a new Liverpool will spring up in that part of the world, affording a centre for British trade and British industry. With iron, coal and timber on the spot, the railway then would become a matter of comparatively little difficulty. Commencing at both ends, and advancing with the progress of the population, it would eventually meet, and thus that iron girdle would be placed around the continent, subjecting territories which are now lying waste and unproductive to the beneficent dominion of civilization and commerce, and maintaining in British hands that superiority which would seem to be the heritage of the Anglo-Saxon race.—*London Post*.

#### BANK ACT—GEORGIA.

The following Bank Act was passed by the Legislature of Georgia, Dec. 21, 1857:

Sec. 1. Provides for the suspension of the act of Dec. 18, 1840, making a forfeiture of a charter a condition for a refusal to pay specie for liabilities, until the 15th November, 1858.

Sec. 2. A refusal to pay now upon demand, although it does not deprive them of corporate existence, yet it makes them liable to suit in any court of the State; the Plaintiff to receive *besides lawful interest 10 per cent damages*. Judges to find a verdict for Plaintiff and judgment to be collected in specie by execution.

Sec. 3. Gives the Governor power to withhold all Executive or judicial proceedings against suspended Banks until the 15th November, 1858, provided nothing in this act shall be so construed as to withhold Executive or Judicial proceedings for a violation of the act of 1840 in case of danger to the security of bill-holders.

Sec. 4. Makes the forfeiture on 15th November, 1858, certain without further indulgence, pursuant to act of 1840, unless a *general resumption* out of the State takes place previous to 15th November next; and in that case the Governor can require the Banks to resume *after 30 days' notice*; no Bank, failing to comply, can avail itself of the benefit of this act.

Sec. 5. If by any suit in law *specie* is required by Plaintiff in payment from Defendant during a suspension of the Bank, upon affidavit from Defendant of a demand for specie, to satisfy an execution, said Bank shall pay its notes so demanded in specie, or upon refusal, may be proceeded against under act of 1840.

Sec. 6. Makes it incumbent upon all the Chartered Banks availing themselves of this act to receive in payment their own notes or other liabilities for any debt due to said Bank; a refusal denies them the privileges of this act.

Sec. 7. Denies any Bank the benefits of this act that sends any portion of its capital

out of the State for the purpose of buying notes of any kind whatever.

Sec. 8-9. No Bank or Agency by itself or officers or Agents can directly or indirectly loan for a short or long time money upon any note, bill, draft, or evidence of a valuable consideration, or upon a contract of any sort whatever either verbal or written, at a *greater rate than 7 per cent*. Such contracts as are for more than 7 per cent., to be utterly void, of no effect, and irrecoverable in law.

Sec. 10. No Bank can sell any but *sight exchange, nor charge any citizen of the State* for such, over 1 per cent. premium, for its own notes. For a violation of this, the person paying it may recover at law from the bank in question 3 times the amount of the excess paid, provided it is not upon foreign exchange; and provided further the person applying shall make oath, if required, the exchange is not bought to sell again.

Sec. 11. Requires affidavits of Bank officers to their reports, to state they have not violated any of the provisions of this act.

Sec. 12. Provides for the perjury of Bank officers to sworn reports—that said reports shall be evidence against defendants on trial.

Sec. 13. Allows no Bank to make a dividend of more than 7 per cent. while under suspension.

Sec. 14. All laws militating against this act, are repealed.

PITTSBURGH, FT. WAYNE AND CHICAGO RAILROAD.—The earnings of the Pittsburgh, Fort Wayne & Chicago R. R. Co., for the month of December, 1857, as compared with December, 1856, and for the year ending December 31, 1857, as compared with the year ending December 31, 1856, were as follows, viz:

MONTHLY REPORT.			
	Dec. 1857.	Dec. 1856.	Decrease.
Freight.....	\$42,369 75	\$66,026 43	\$24,256 68
Passengers.....	53,010 85	65,489 10	6,578 25
Mail.....	4,483 29	4,483 29	
Miscellaneous....	181 66	817 71	646 05
	\$105,944 55	\$137,425 53	\$31,480 98

YEARLY REPORT.			
	Year 1857.	Year 1856.	Increase. Decrease.
Freight.....	\$654,928 61	\$690,875 53	\$35,947 92
Passengers.....	941,175 14	766,523 30	\$174,892 84
Mail.....	53,787 48	37,211 61	16,575 87
Mis....	3,848 73	3,017 62	831 10
	\$1,653,739 95	\$1,497,457 06	\$192,291 81
	\$156,182 89		

#### REVENUE OF ENGLISH RAILWAYS IN 1857.

*Herapath's Journal* says on this subject:

By Mr. Hackett's tables in another column, it will be seen that the revenue of railways of the United Kingdom, in 1857, was no less than twenty-four millions sterling.

The capital of these lines is about three hundred millions.

The railway profits the last year must have been about thirteen millions, or about four per cent. of the total capital, but from a considerable portion of the three hundred millions capital being in loans and preference shares, at a rate of interest averaging more than the percentage of profits, the average dividend is about 3½ per cent. per annum.

Railway capital will not in future materially increase, while the revenue will enlarge as usual, except perhaps for a brief space of time.

The capital remaining at about 300 millions an addition of 2 millions to the 13 millions, profit will raise the dividends from 3½ per cent. to 4½.

A long line of railway that is made, and has been opened for years, on which a full amount of capital has been expended, and in respect of which no heavy engagements are about to be entered into, is one of the best properties a man can invest in. It is substantial, permanent, and must be progressive.

The conversion of loans into fixed perpetual 3½ per cent. Debenture Stock will be a future and lasting benefit for railways. It is sure to be done.

COAL IN WASHINGTON TERRITORY.—The coal veins recently discovered at Bellingham Bay, on Puget Sound, in Washington Territory, are reported to be of great extent and value. Nearly four thousand tons had been dug and sold at last accounts, most found a market at San Francisco. None of the coal yet shipped however, equals that now in process of excavation, which is said to be of the very best quality, and the indications are that the bank of this quality is inexhaustible. Previous to the last excavation, Dr. Evans made an analysis of inferior specimens of the coal, and found the result to be as follows:

Specific gravity.....	1.746.	
Carbon in coke.....	60.23	
Volatile gases.....	26.85	
Moisture.....	10.51	
Ashes.....	1.93	
Sulphur.....	.47	
	100.00	

Dr. Evans, the geologist, speaks in high terms of this coal, and says it will produce an excellent coke, and is well suited to manufacturing and domestic purposes. It burns very freely, and although rather light for long sea voyages, unless the construction of furnaces should be changed, lessening the draft, is suitable for river navigation. It is used to great advantage by the steamers *Active* and *Constitution* on the Sound. The mines are as yet worked but to a very limited extent, only half a dozen men being employed where there should be forty or fifty, to make the works remunerative. The coal is likely to prove of great importance in developing the resources of the countries on the Pacific coast.—*Boston Journal*.

NEW METHOD OF ESTIMATING SILVER IN ARGENTIFEROUS GALENA.—For this purpose, M. C. Meine directs that about 300 grs. of the powdered galena to be examined is to be boiled in a porcelain capsule with nitric acid, diluted with three or four times its volume of water. After a short time the metals dissolve, and the sulphur separates. The liquid is then filtered, and the filtrate super-saturated with ammonia, and filtered again rapidly, the precipitate being washed with dilute ammonia. In this way the ammonia first precipitates all the metals which the galena contains as oxides; on adding, however, an excess of ammonia, those metals (e.g. silver) whose oxides are soluble in that re-agent dissolve, while those (e.g. lead) whose oxides are insoluble, remain unacted upon. If, therefore, excess of hydro-chloric acid, and a little nitric acid, be added to the ammoniacal solution, the silver will be precipitated in the form of chloride, and can then be collected, &c., and weighed. No other metal which the galena might contain would be thus separated, as the chlorides formed would be soluble. By this process the author has determined the amount of silver in various samples of galena, oxide of lead, commercial leads used for gas pipes, and in the lead glaze used for earthenware. M. Meine observes that his process may be employed in every case where the object is to separate silver from the other metals:



## MONETARY AND COMMERCIAL.

There has been but little change for some weeks past in financial matters from week to week, although in the aggregate there has been a decided improvement. The supply of capital has not been greater than the demand, and paper not generally known as first class is still difficult to be negotiated. The rates charged are 10 to 12 for well known and undoubted, while other grades are done at rates varying from 15 to 35. Collections are becoming a little easier, though there are still large amounts unpaid. Exchange on New Orleans and the East remain at previous quotations. Money matters in New York and other Eastern cities continue to improve. The *Courier and Enquirer* of February 2, says:

The Bank Statement for the past week shows increased strength and increasing business; the deposits and loans having each increased over a million.

The Sub-Treasury funds show an increase over those of the preceding week, and are in excess of the balance on hand at the commencement of February, 1856.

The Philadelphia Bulletin of Saturday evening says:

The money market continues to be abundantly supplied with capital, and in the absence of good mercantile paper, much of it finds its way into first class loans. The out-of-door rates for undoubted paper are 8 and 9 per cent., but we hear of occasional negotiations at 7 per cent.

This condition of things extends to Europe also. A correspondent of the Commercial Advertiser, in a letter dated 15th of January, says:

The bank of England yesterday reduced their rate of discount to 5 per cent.; a point lower than has been touched during the past fifteen months. The step had been fully anticipated, and it therefore produced little effect upon the funds. In the open discount market the rate had already fallen much lower, while in the stock exchange the supply of money was still more abundant. At present, such bills as are of first rate character can be negotiated at 4 per cent., while loans on Government securities may be obtained with ease at from 2½ to 3 per cent.

Consols at the last date were quoted 94½. They have since again touched 95, but the news of the attempted assassination of Louis Napoleon has caused some dullness, and the final price this evening was 94½.

The Mercantile convulsions at Hamburg have been followed by the most singular rebound ever witnessed. Only a few weeks ago discount was hardly obtainable at 12 per cent., and on Saturday last it was down to 2½ per cent. Evidently it was confidence that was wanted, and not money.

Advices from Europe state that the subscription to the Illinois Central Railroad Loan (\$3,200,000) has reached the amount of \$1,175,000. The loan for the Erie was also said to be progressing favorably.

The Committee on Roads in the Virginia Senate have agreed to report a bill recommending an appropriation of two and a half million of dollars to the leading lines of Railroads in this State, as follows: To the Covington and Ohio Railroad, \$800,000; Orange and Alexandria, \$300,000; Alexandria, Loudoun and Hampshire, \$200,000; Manassas Gap, \$200,000; Norfolk and Petersburg, \$250,000; York River, \$250,000; Richmond and Danville, \$200,000; and Virginia Central, \$200,000.

The favorable news from all quarters has not lost its influence on the stock market. The *Courier and Enquirer* of January 30, says:

In Stocks the market is quite active, the operations to-day being largely for cash. State Loans show a further advance on last week's prices. North Carolina Sixes being held at 94 and 95, Tennessee 8½ and 9½, Michigan 94½ and 95, California Sevens have advanced to 78, Missouri Sixes are held at 84½ and 85, Indiana Fives 84. In Railroad Shares the sales were again large and holders are quite firm at the quotations at the Board. Since the closing sales of Saturday we note an advance in New York Central Shares 1, Erie ½, Michigan Central 2½, Michigan Southern ¾, Cleveland and Toledo 1½, Panama 1½, Chicago and Rock Island 1½, Galena and Chicago 3, La Crosse ¾.

## SALES AT THE NEW YORK STOCK BOARD—Feb. 1.

\$3,000 Tenn. State 6's, 90.....	89½
4,500 North Carolina State 6's.....	94
1,000 Terre Haute and Alton 2d mort. Bonds.....	39
2,000 Cal. 7's, 70.....	78
16,000 Misso. 6's.....	84½
10,000 Michigan C. 8 p. c.....	96½
250 shares New York Central.....	84
300 " Cleveland & Toledo.....	44½
25 " Hud. River R. R.....	19½
550 " Harlem R. R. stock.....	9½
25 " Mich. Cent.....	64
25 " Mich. S. & N. Ind.....	34
10 " Panama.....	91½
150 " Cleve. & Pitts.....	12
33 " Cleve. Col. & Cin. R. R.....	90
109 " Chicago & Rock Island.....	70½
375 " Galena & Chicago.....	80
10 " Pacific Mail S. Co.....	67½
150 " LaCrosse & Milwaukee.....	11½
100 " Illinois Central.....	97½
100 " Erie R. R.....	23½

## PROJECTED RAILROADS IN NEW JERSEY.

Notice has been given of intended application to the Legislature of this State for authority, by original charter and supplement, to construct the different new railroads and extensions comprised in the subjoined list:

"For a railroad from Barnegat Bay to the Delaware, at or near Camden; for a railroad from Freehold to Keyport; for a railroad from South Amboy to a point on the Hudson river, opposite New York; for a road from Perth Amboy to Bound Brook, with the privilege of extending it to New Hampton; for a road from Medford, Burlington county, to Haddonfield, Camden county; for a supplement to charter of Belvidere road, authorizing an extension so as to connect with the Warren road; to consolidate the Belvidere and Bridgeville Railroad Company with the Bridgeville Manufacturing Company, with the privilege of banking, the bank to be located at Bridgeville; to authorize the books of subscription to the capital stock of the Perth Amboy Railroad to be opened for new subscriptions, to confirm the election of directors, and to authorize, on compensation being made, the taking of land for their terminus: for a supplement to charter of Central Railroad, to authorize them to extend their road to some point opposite New York; to authorize Camden and Atlantic Railroad to construct a branch to some point on the Delaware, within the City of Camden; to authorize the city of Cape Island to subscribe \$50,000 to the Cape May and Atlantic Railroad; to authorize the county of Cape May to subscribe \$50,000 to the Camden and Atlantic Railroad; to consolidate the Northern Railroad Company of New Jersey with the Piermont Railroad Company of New York."

## CITY RAILROADS IN PHILADELPHIA.

The following magnificent programme for the construction of street Railroads has been inaugurated in Philadelphia. The *Enquirer* of that city says:

We learn that a movement is on foot, which looks to the organization of a City Passenger Railroad Company, with authority to construct and put into operation railroads on all the great thoroughfares of Philadelphia. A preliminary meeting was held yesterday, and all citizens who feel an interest in the subject, are invited to call at the Franklin House, to-day, at any time between 10 A. M. and 4 P. M., where a committee will be in attendance, to give the necessary explanations. The object is to obtain authority from the Legislature for railroads along the following routes:—

1. From the Navy Yard to Richmond, via Second and Third streets.
2. From the Exchange, via Chesnut and Walnut streets, to West Philadelphia, with a branch to Mantua.
3. From the Exchange, via Chesnut and Tenth streets, to Girard College, to return by way of eleventh, to extend to the Baltimore Depot.
4. From the Exchange, via Chesnut street to Tenth, down Tenth to Spruce, out Spruce to Twenty-third, and down to Gray's Ferry Road, to return by way of Pine street.
5. From the Exchange to Second street, up Second to Arch, out Arch to Fifteenth, and thence to Fairmount. To return by way of Sixteenth street.
6. From the Exchange, up Second to Vine, and out Vine to Fairmount. To return by way of Callowhill street.

7. From the Exchange to Third street, out Third to Coates, and out Coates to Fairmount. To return by way of Green, and have a branch to Laurel Hill.

We learn that the gentlemen who have taken this matter in hand, are abundantly able to guarantee the necessary amount of capital, and they are anxious to make such arrangements with the omnibus proprietors, as shall seem fair and just under the circumstances, and afford general satisfaction. The movement is, perhaps, the most important of a local character, that has been started for years, and it has doubtless been prompted by the extraordinary success of the Fifth and Sixth Streets Passenger Railroad. It may become expedient to modify the routes above mentioned to some extent, but the general plan and scope of the undertaking may be inferred from the brief outline we have given.

## OLD STAND.

## Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,  
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

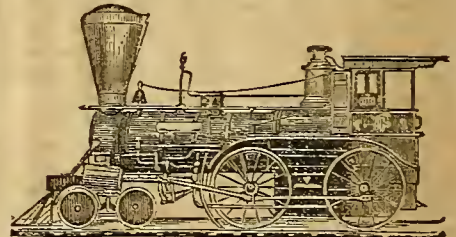
Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forging of almost every description, &c., &c., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES.  
Of the late firm of Bridges & Bro.  
JOEL C. LANE.

Feb 4/56

CINCINNATI  
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

IRON BOILER FLUES  
PASCAL IRON WORKS.

MORRIS, TASKER & CO.,  
Manufacturers of

LAP-WELDED BOILER FLUES,  
1½ to 7 inches outside diameter, cut to definite lengths as required.

WROUGHT IRON WELDED TUBES.  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 55 South Third St.,  
PHILADELPHIA.

RAILROAD IRON.  
LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard 1,100 tons rails 55 lbs. per yard. Also, several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GODMAN & CO.,  
No. 7 Wall st., N.

Feb. 7, '56-2m.]



TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'rt.	When Payable.	Where Payable.	When Due.	Description of Bond.	Quot of Bonds.	Name of Company.	Quot of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	Last Dividend.
\$1,000,000	6			1860	1st mortgage.	.....	Al x'ndria, Lon. & Hamp sr	173	6,000,000.00					
408,800	7			1862-3	2d "	.....	Androscog'n & Kennebec	54.53	1,400,000.00			209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Allanta and LaGrange.	86.5	1,000,000.00	199,000.00		278,123.74	173,780.74	4 pr. ct. 6m
52,646	6			now	"	.....	B'ng'r, Old T. & Milford.	12.5	135,000.00	52,646.23		30,104.40	8,671.61	8 pr. ct.
500,000	7			1860	1st mortgage.	.....	Boston & Worcester.	44 5-8	4,500,000.00	500,000.00	1,108,781.90	437,062.03	180,000 4.5m	5 pr. ct. 6m.
500,000	7		N. Y.	1866	Income.	.....	Buffalo & State Line.		1,300,000.00					
200,000	7			1857-9 62	Domestic.	.....	"							
200,000	7			1864	4th mortgage.	.....	Central Ohio.							
577,181	6			1872	1st mortgage.	.....	Champlin & St. Lawrence	43	1,872,800.00	1,601,087.00		168,200.00	77,700.00	10 per ct.
192,200	7			1874	2d "	.....	"							
380,000	7				Domestic.	.....	Ch'rl'te & South Carolina.	110	1,700,000.00	380,000.00		291,219.86	47 per ct.	\$72,300
1,440,000	7				1st mortgage.	.....	Ch'go, Burl'ng'n & Quincy.	138	3,746,900.00	3,114,000.00	1,095,185.00	571,725.23	15 pr. ct. 6m.	
1,200,000	6-7-8		N. Y.		2d "	.....	"							
374,000	8				Convertible.	.....	"							
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa.							
532,000					2d "	.....	Cin. Wil'ng'n & Zanesville	132	1,761,149.16	2,241,500.00		221,491.96		
104,000					3d "	.....	"							
305,500					Income.	.....	"							
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	139	4,741,220.00			1 3 754	700,804	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning.	85	1,500,000.00					
400,000	7			1864	2d "	.....	"							
1,000,000	7			1873	1st mortgage.	.....	Cumberland Valley.	52	1,218,300.00			160,511.66	81,101.56	\$33,250.24
500,000	6			1857-8-9	1st mortgage.	.....	Dayton & Cin. short line.	52	1,000,000.00	1,000,000.00				
350,000	7				1st mortgage.	.....	Eastern Railroad.	93 6-10	3,345,000.00			665,578.79	288,077.84	\$234,133
740,000	7				1st mortgage.	.....	East Ten. & Virginia.	130	625,450.00			30,897.70	19,692.30	
88,000	10			1869	1st "	.....	Essex Railroad.	20	700,000.00					
400,000	7			1861	2d "	.....	Evansville & Crawf'dale	109	2,228,637.50			243,970.42	136,061.90	\$133,581.45
200,000	10			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.		3,540,000.00			621,162.52	213,837.81	3 per cent.
100,000	6				1st mortgage.	.....	Fox River Valley.	33	800,000.00					
100,000	6				1st "	.....	Fair Haven Branch.	15	300,000.00			50,381.33	14,822.45	\$166,240.00
300,000	7				1st "	.....	Georgia RR & Banking Co	233	4,156,000.00			1,068,202.54	357,089.32	\$166,240.00
4,000,000	6-1-9			1858	1st "	.....	G't Falls & Conway R.R.	20				27,376.69	14,207.07	
2,000,000	7			1869-70	1st "	.....	G't West'n R.R. of Can.	281 1/2	4,191,550.00			2,068,836.00		8 pr. ct.
1,812,000	7			1860	2d "	.....	Housatonic Railroad.	74	2,000,000.00			339,196.50	176,529.97	
12,885,000	7			1875	3d mortgage.	.....	Hudson River.	144	4,000,000.00			1,924,382.44	718,037.40	
4,115,000	7			1875	1st "	.....	"	144	4,000,000.00					
3,000,000	7			1875	1st "	.....	Illinois Central R.R.	704	18,453,376.00			1,476,035.27	1031,499.08	7 pr. ct.
600,000	7			1860	Precland.	.....	"	704	3,558,376.00					3 pr. ct.
700,000	7	Nov. 1.			1st mortgage.	.....	Indiana Central.	72 4				351,871.00		
50,000	7	Jan. & July 1		1862	2d "	.....	"							
700,000	7				1st mortgage.	.....	Iron R.R.	13	123,700.00					
218,000	7				1st "	.....	Kentucky Cen. 2d Div.		719,500.00					
1,000,000	7			1866	2d "	.....	Knoxville & Kentucky.	32	166,000.00			23,233.59	14,233.59	
1,000,000	7			1875	2d "	.....	Laurens (S. C.) R.R.	184				50,224.71	14,149.13	\$1,000
2,000,000	6				1st "	.....	Louisville & Nashville.	12 35	300,000.00			587,236.57		10 pr. ct.
2,500,000	7				1st "	.....	Lowell & Lawrence.		2,697,090.00					
4,000,000	7			1868	1st "	.....	Mad River & Lake Erie.		2,697,090.00					
60,000	7 and 8			1874	2d "	.....	Manchester & Lawrence.	26	1,000,000.00					\$24,000
490,000	8			1867	1st "	.....	Marietta & Cincinnati.							
329,000	8				1st mortgage.	.....	Mexican Gulf R.R.	27						
320,000	8			1881	1st "	.....	Milwaukee & Horicon.	30						
6,000,000	6			1884	2d "	.....	Mineral Point R.R.	32						
500,000	7			1869	1st mortgage.	.....	Mobile & Ohio.	497	10,000,000.00			253,498.96	162,802.24	
8,356,000	7	May & Nov.	N. York		1st mortgage.	.....	Nashua & Lowell R.R.	15	600,000.00			193,752.42	55,501.74	7 pr. ct.
32,892,600	7	June & Dec.	N. York	1864	Con. till 1859.	.....	New Haven & North'm'tn	55	922,500.00					2 pr. ct. 6m
900,000	7			1873	1st mortgage.	.....	New York Central.	555	23,067,460	14,763,807		7,707,348	3,609,481	3 pr. ct. 6m
926,000	7			1864	2d "	.....	"							
411,700	7			1863	1st "	.....	N. Y. & Harlem R.R.	133	5,717,100.00			1,040,493.25	61,678.71	\$37,692.30
500,000	6				1st "	.....	" Pref.	50	1,580,000.00			245,713.00	51,544.40	
300,000	6				2d "	.....	N. Y., Prov. & Boston.	66	1,700,000.00			120,571.50		
1,500,000	6			1873	1st mortgage.	.....	N. Lon., Wilt'm'ntu & Pal.							\$25,000
2,000,000	6			1873	2d "	.....	Pontchartrain R.R.	5	600,000.00					
1,500,000	6			1873	3d "	.....	N. O., Opel'as & Gr't West.	62 1/2	6,000,000.00			116,793.00	366,118.80	7 pr. ct.
3,000,000	5			1859	1st mortgage.	.....	N. Y. & New Haven.	103 1/2	3,000,000.00			1,007,666.48		
419,700	7			1877	1st mortgage.	.....	North Western Va. R.R.							7 pr. ct.
221,800	6			1860	"	.....	"							
400,000	6			1866	1st mortgage.	.....	Northern (N. Y.) R.R.	118	2,000,000.00			600,000.00		
1,200,000	7			1875	2d mortgage.	.....	North Missouri R.R.	19 2				25,176.74	88,458.56	2 1/2 pr. ct.
300,000	8			1868	1st mortgage.	.....	Norwich & Worcester RR	60	2,111,500.00			304,236.33		
300,000	8			1873	1st "	.....	"							
350,000	6			1861	1st mortgage.	.....	Ogd'sb'g, Clay't'n & Rome	94				289,690.10	137,875.93	5 pr. ct.
800,000	7			1861 to 1874	1st "	.....	Ontario, Simcoe & Huron	88 3	2,937,500.00			276,539.02		
1,260,000	6			20 years.	1st mortgage.	.....	Orange & Alexandria R.R.							
500,000	6				1st mortgage.	.....	Peoria & Bureau Val. R.R.	47	1,500,000.00					6 pr. ct.
250,000	6				1st "	.....	Philadelphia & Trenton.	28 1-5	1,000,000.00					
317,000	7				1st "	.....	Portsmouth & Concord.	47						
300,000	7				1st "	.....	Potsdam & Watertown.	76	2,000,000.00					
202,300	7				1st "	.....	Rutland & Washington.	62 1/2	950,000.00			68,525.42		
2,500,000	7				1st mortgage.	.....	St. Louis & Iron Moun. R.R.	86	6,000,000.00					
595,000	7				1st "	.....	Salem & St. Louis R.R.	16 3/8	400,000.00					
200,000	7				2d "	.....	Sud'sky, Mans'd & Newk	116				19,050.64		
					2d "	.....	Sullivan Railroad.	26	500,000.00			75,246.06	17,378.08	
					1st mortgage.	.....	Tennessee & Alabama.	145				39,586.44		11m. 12. pr. ct.
					1st mortgage.	.....	Terre Haute & Richmond	73	1,294,450.00					
					2d "	.....	Toledo, Wabash & Western	212						
					2d "	.....	Troy & Boston.		1,000,000.00					
					1st mortgage.	.....	Vicksburg & Jackson.	46						
					1st mortgage.	.....	Virginia & Tennessee.	215	3,000,000.00			322,048.60		2 pr. ct.
					1st mortgage.	.....	Westchester (Pa.) R.R.	31	165,000.00					
					1st mortgage.	.....	Wilmington & Manchester	171						
					2d "	.....	"							
					1st mortgage.	.....	Winchester & Potomac.	32						
					2d "	.....	Worcester & Nashua.	5 69						



## INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



### INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

#### THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Keosauqua, Lafayette, Jackson, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

### VIA LAWRENCEBURGH.

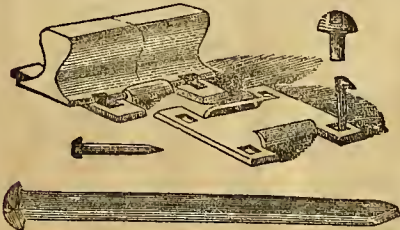
Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

### GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

Feb 28

CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURGH,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855. [Jan]-19 Agent.

### APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, O.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

### SUCTION & FORCE PUMP

AND

### Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

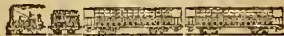
Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

### Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27. RICHARD NORRIS & SON.

### Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

OR SUMNER SMALL, Boston, Mass.

F. W. RHINELANDER. EDWIN A. POST.

### RHINELANDER, BOORMAN & CO., RAILWAY AGENTS

AND

### COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

### Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. Feb 5-ly

### Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer. No. 298 H Street, Washington, D. C. April 2

## W. G. HYNDMAN'S



### Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap 23 41 East Second street, Cincinnati, O.

### THOMAS D. STETSON, Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc 22

### RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON, feb 5-1f 10 Wall St., near Broadway, New York.

### ALLEN & NOYES' METALLIC PACKING.

### To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

Jy 23-1m

### D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

oct 29-6m

D. M. CARHART, Box 1531, Cleveland, Ohio.

### T. F. RANDOLPH & BRO. Mathematical Instrument Makers,

N. W. Cor. 5th & Walnut sts.,  
CINCINNATI, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER, General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent, Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE &amp; CRAWFORDSVILLE, and the TERRE HAUTE &amp; ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute &amp; Richmond R. R.

## PAGE'S

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEE &amp; LEAVITT.

1857.

November 30.

1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA



## RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

## FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., or Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office south-east corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

## TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.  
FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.  
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L

an2

Office No. 2 Burnet House.

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE &amp; CO., Jan 8 1y 119 Walnut st., Odd Fellows' Buildin

1857.

Summer Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton

[TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, PHILADELPHIA, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPORT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST EAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connect—at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## “STEAMER BAY CITY.”

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:30 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

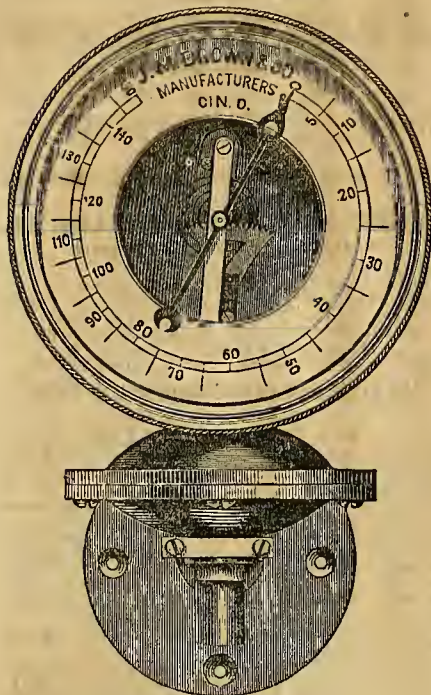
The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



# J. M. BROWN & CO.,

MANUFACTURERS OF



## IMPROVED Corrugated Steel Spring Gauges,

FOR  
LOCOMOTIVES AND STATIONARY ENGINES.

**T**his Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
mar26 250 East Front street, Cincinnati, O.



## Prosser's Patent LAP-WELDED IRON BOILER TUBES,

every article necessary to  
**DRILL THE TUBE-PLATES**  
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tyes.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

# The Great Arnold Secret Discovered at Last

## BUTLER'S MERCANTILE RECORD AND COPYING FLUID INKS.



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

MANUFACTORY NO. 39 VINE ST., CINCINNATI.

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

JAS. J. BUTLER, Agent and Manufacturer.  
N. B. In connection with any other Fluid Ink, bearing the same or any other name. Parties wantlog my Fluid, must be careful to address Orders to 39 Vine street.

*Transportation Office, Cincinnati, Hamilton & Dayton Railroad.*  
JAMES J. BUTLER, Agent.—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly J. REED, Clerk.

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana, and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time in receiving them. My prices are lower than Eastern Manufacturers generally.

J. J. BUTLER.

## GENERAL RAILWAY SUPPLY AGENCY.

SNOOK & HILL'S PATENT

## LOCOMOTIVE LAMPS,

83 Liberty Street, Cor. of Broadway,  
NEW YORK.

**JOHN W. KELLY,**  
MANUFACTURERS' AGENT,

For the sale of all Materials used in the Equipment and repairs of

## RAILROAD ENGINES & CARS,

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....FEBRUARY 11, 1858.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
“ “ per month .....	3 00
“ “ six months .....	12 00
“ “ per annum .....	20 00
One column, single insertion .....	4 00
“ “ per month .....	10 00
“ “ six months .....	40 00
“ “ per annum .....	80 00
One page, single insertion .....	10 00
“ “ per month .....	25 00
“ “ six months .....	110 00
“ “ per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### CONTENTS.—NO. 51.

#### EDITORIAL.

Mackinaw City .....	745
Progress of Locomotion—Value of Time .....	745
Arizona Territory .....	746

#### RAILROADS.

Panama Railroad .....	745
Northern Central Railroad Co. ....	746
Pennsylvania Railroad Company .....	743

#### MISCELLANEOUS.

Statistical Book-keeping .....	748
Railroads in Maryland .....	740
Relations of Gold and Silver .....	750
Editorial Correspondence .....	751
Monetary and Commercial .....	751

### MACKINAW CITY.

Attention is called to the circular of the Trustees of Mackinaw City. It is naturally one of the best commercial points in the north or west, a great, natural ferry, surrounded with the elements of a large business, the termini of railroads, and a point by which all the heavy commerce of the lakes must pass. The proposition of the proprietors to donate valuable building lots to all who will improve them, is certainly a very liberal one, and must tend to an early and rapid development of its resources. Arrangements have been made for a large amount of building during the coming summer. The Legislature of Michigan at its special session made it the County seat of Emmett County. Other measures of public interest are also in contemplation. To enterprising mechanics and business men, desiring the advantages obtained in the development and growth of an important town—Mackinaw offers the greatest inducements.

The number of hogs killed at Evansville, Ind., this season, is 111,124; at New Albany, 34,750; and at Madison, 58,470.

VOL. 5.—No. 51.

### PROGRESS OF LOCOMOTION—VALUE OF TIME.

That the civilization of the world is rapidly changing, and men growing nearer to one another is one of the recognized facts of the day. One great effect of this change is to make the nations of the earth understand one another better, and make them less disposed to war, and aggression on one another. Say what we please, about the war with Russia; the outbreak with India; or, other smaller conflicts—certain it is, that from the Peace of 1815, to 1858, there has been no general war, and comparatively little loss from that cause. From 1775, the commencement of the American Revolution to 1815, (forty years,) there was an incessant and bloody War, among the principal Christian Nations; Revolutions, overturnings, and conflicts of all kinds, occupied the mind, and the energies of Europe. In 1815, this great series of conflicts ceased. Some attributed it to the Fall of Napoleon; but Napoleon was only the effect, not the cause, of War and Revolution. He was the child of War, and the creature of necessity. But there was another cause of change, to which reflecting minds will attribute much of the peaceful change, which followed the era of 1815, that was the epoch of a great change in the Arts of the world; especially the art of locomotion. It was the era of Steam. In 1807, the Hudson was navigated by steam: in 1812, the Ohio; and in 1817, the first steam vessel crossed the Atlantic. The nations not only needed rest; but, the Public Mind became occupied with new, and wonderful arts. These arts related to the Commerce of men and things; and thus, they fixed the thoughts of men on the arts of peace, and led to the social, and commercial intercourse of nations. Repeatedly, when war with England impended, commerce borne on the wheels of locomotion interfered to stay the hands of vengeance. As Railroads, and steam ships, and telegraphs have multiplied, it seems more, and more impossible to bring any commercial nations into conflict; and soon, we think it will be in fact, impossible.

In just half a century, there have been three great eras of locomotion, and these may be strikingly illustrated, by a journey, between Cincinnati and New York. The first of these eras is that of the *common road*, without any steam. In the year 1810, there was no steamboat on the Ohio, and we believe no stage coach west of Carlisle, Pennsylvania. If a gentleman would take his family to “the East,” (as the other side the mountains was called,) his best way was to go in his own carriage. Then he must have his driver, and go rigged with axe, chain, tar, and pistols, for his convenience, and safety. Then, with great diligence, he might arrive in New York, in four weeks, and that would be doing very well. After such a journey, as this, it would be absurd to stay less than two, or three months; and accordingly, visits of this description, usually occupied four or five months. Such visits also, like the angels, must be few, and far between. Two, or three, in a lifetime, must be enough, and those relatives and friends

parted by the Alleghenies, were almost parted forever.

The *second era* of locomotion was the era of the Steamboat. The steamboat, however, could only go where there were steamboats. They ascended the Ohio, and the Hudson; but, between there was a great land interval, covered with mountains, and their spurs. This interval must be traveled, and as in the meanwhile the Cumberland road had been made; that became the great artery, through which flowed the travel—East and West. A journey then was, by steamboat, from Cincinnati to Wheeling, which in 1830 took about three days; then by stage to Baltimore, which was also about three days; then from Baltimore to New York, which might be done in one day. Thus, by traveling night and day, in stages, and steamboats, we could in 1832–5, make the journey in *seven days*, or, in one week. This was a wonderful feat, and when people were told, that one day, the Railroad would take people from Cincinnati to New York, in *three days*, it was looked upon as one of the dreams of a heated imagination. Such a thing was impossible!

The *third era* is that of the Railroad, in whose day, we live. While we are in this day of wonders, will any one say, it is *impossible* to do more? Perhaps, it is; perhaps not. We now make the journey from Cincinnati to New York in about *thirty hours*, (not days,) being less than *one-twentieth* part of the time, required in 1810! But, one thing we do know, that we *could* make the journey in *half* the present time, if it was desirable. We can go *fifty miles* an hour safely, if we choose. It is 254 miles from Cincinnati to Cleveland. We could make it in *five hours*. It is 190 miles from Cleveland to Buffalo. We can make it in *four hours*; and thence, we can make New York in *eight hours*; and thus, we should only be some 17 or 18 hours, in making the whole journey. We could do this safely; but, the companies will never undertake it, because it is too expensive. Now let us see what has been gained. Let us compare the actual cost *per each person*. Thus:—

	Time.	Cost.
Journey in 1810.....28 days...	.....	\$100 00
“ “ 1832.....7 “ .....	.....	50 00
“ “ 1858.....1½ “ .....	.....	20 00

We see, that the reduction of cost is almost in the same ratio, as that of time; and that the constant, and continuing influence of steam, and of improved locomotion, is to diminish both the time, and cost of the movement of persons and property. Universal commerce is thus increased and multiplied, as statistics will prove, in even a greater ratio, than the diminution of cost. Let us look one moment, at the gain, counting time:—

Gain since 1810.....	\$80 00
Value of time for a merchant.....	78 00
One Month's interest on (say \$5,000).....	50 00
One Month's profits.....	300 00

Gain.....\$508 00

Each merchant of Cincinnati gains, on each business trip to New York, at least \$500 00. It is this immense actual gain, and profit to society, by the use of steam on land, which has caused what some call the Railroad fever; but, which is really nothing but a grand effort of



society to avail itself of all possible gain, by the success of the new element of power and commerce. And, never has there been a grander effort, than this of the United States, to cover our vast possessions with the Railroad. See the progress!

In 1835..... 500 miles.  
" 1851..... 12,800 "  
" 1853..... 25,000 "

This 25,000 miles cost, at least seven hundred and fifty millions of dollars.

There may be a Railroad fever; but, it is the most fortunate disease that ever occurred, and it will continue and prevail for many years, in spite of any, or all commercial crises. The Nation needs many more Railroads, and will have them.

#### ARIZONA TERRITORY.

In our issue of January 7, we gave our views against the bill introduced into Congress for the organization of the territory of Arizona. It proposed to make a distinction between mineral and agricultural lands, to sell or lease the mineral lands in small quantities, to tax the products of the mines as well as retain all minerals from lands sold as agricultural, and to apply the anti-democratic laws of Spain and Mexico to the minerals. Thus withholding from the people the only inducement to settle a country so far from market and civilization, while here amidst civilization they can preempt a quarter section of land and be protected in all it contains.

It is greatly to the interest of our country and the government, that this territory should be peopled with enterprising and thrifty citizens. It would result in an influx of silver that would restore the proper equilibrium between it and gold, it would relieve the government of the cost of military protection, and of the now much called for outlay for telegraphs and railroads. There is no reason why an exception should be made against Arizona, by imposing on it the arbitrary and despotic laws of old Spain, and thus cripple the young giant at his birth. There is no reason why the same laws should not obtain here as elsewhere of granting to actual settlers a quarter section of land, with all it contains to the centre of the earth; the discoverers and owner of a mine of silver, gold, copper, lead or iron will then be justified in making the necessary outlays for machinery, &c., for mining, and need not fear molestation from casual itinerants, or handed desperadoes who would otherwise pull down, his very house to get at the precious metals that may compose its foundation.

Inclosed we send a petition to Congress, which it is the obvious interest of every business man, citizen and lover of equal rights, to sign and forward immediately, that we thus may induce Congress to act with justice and liberality, and that our citizens who contemplate going out there to settle during the coming spring, may be protected in their rights and encouraged in their efforts to develop this delightful and interesting region. "To the victors belong the spoils," and to the hardy pioneer should belong the result of his enterprise and daring.

#### PANAMA RAILROAD.

The annexed statement of the condition of the Panama Railroad Company shows a highly favorable result—the result, if the account is true, in a great measure of good management. It will be seen that after paying 12 per cent. dividend, the Company have a surplus of \$390,581 41 for the year ending December 31, 1857:

Balance to credit "Income Account," after Dividend, January 5, 1857..... \$378,394 42

##### RECEIPTS.

From Passengers.....	\$693,250 18
From Freight.....	354,437 78
From Freight, treasure.....	122,076 60
From Mails.....	112,068 12
From Baggage.....	16,591 03
From Miscellaneous.....	2,405 69
	1,305,819 60

Total..... \$1,684,214 02

##### DISBURSEMENTS.

Interest on First Mortgage Sterling Bonds (£450,000) with Ex. and Com. \$155,240 00	
Interest on Second Mortgage Sterling Bonds (£56,250) for 6 mon., with Exch. and Com.....	9,720 00
Interest on Con. Bonds, 1st July, \$223,000, at 3½ per cent.....	\$7,895
Int. on Con. Bonds, 1st Jan., \$160,000, at 3½ per cent.....	5,500
	13,405 00
Running Expenses.....	348,357 00
Estimated Depreciation of Iron, Ties, &c.....	40,000 00
Loss on steamers Columbus and Panama.....	50,000 00
Office Expenses.....	22,250 00
New Granadian Government—proportion Mail receipts.....	10,000 00
Div. No. 10, July 6, on \$4,777,000, 5 per cent.....	\$236,620 00
N. Gran. Gov. proportion do., 6 per cent.....	8,596 60
	295,218 60
	944,520 60

Balance to Credit Income Account, December 31, 1857.....	\$739,693 42
Div. No. 11, Jan. 7, on \$4,840,000, 6 per cent.....	\$290,400 00
N. Gran. Gov. proportion do., 3 per cent.....	9,712 00
	299,112 00
Amount Appropriated to Sinking Fund.....	50,000 00
	349,112 00
Balance to Credit Income Account after Dividends.....	\$390,581 42

*Am. Railway Times.*

**THE NATIONAL DEBT.**—On the 17th day of November last the debt of the United States stood as follows:

Loan of 1842.....	\$2,883,364 11
" 1846.....	8,700 00
" 1847.....	9,412,700 00
" 1848.....	8,908,341 80
Texas Indemnity.....	3,461,000 00
Texas debt.....	268,968 42
Old funded and unfunded debt.....	114,118 54
Treasury notes.....	107,961 64
Total.....	\$25,165,154 51
To which may be added the Treasury notes since authorized.....	20,000,000 00
Present total.....	\$45,165,154 54

**BANKS IN THE STATE OF NEW YORK.**—The following statement gives the comparative condition of the Banks of the State of New York twenty years ago, and at the present time:

January 1, 1837—Circulation.....	\$24,198,000
Dec. 26, 1857— do.....	23,899,964
Decrease.....	\$298,035

##### SPECIE.

January 1, 1837—Specie in Banks.....	\$ 6,557,000
Dec. 26, 1857— do.....	29,313,421
Increase.....	\$22,757,421

**DES JARDINS' ACCIDENT.**—The Canada papers are filled with details of suits for damages against the Great Western Railroad Co. for losses of life and limb at the Des Jardins' accident. A number of heavy verdicts have already been rendered.

**EVANSVILLE, IND.**—The Report of the Board of Trade of this town gives the amount of exports as follows:

Groceries.....	\$2,034,625
Dry goods.....	\$45,271
Other Merchandise.....	1,216,700

Total sales of Merchandise.....	\$4,096,600
Total value of the principal manufactures from the mills and workshops was.....	\$1,634,708

The number of steamboats that landed at the wharf, and delivered and received freight, was.....	2,544
Boats that landed without receiving or discharging freight.....	125
The number that passed without landing, was only.....	69

Whole number that passed..... 2,738

The whole number of brick buildings erected within the corporate limits, many of which were large and expensive structures, was sixty-four. The number of frame buildings erected was twenty-five, making the whole number within the city limits EIGHTY-NINE. Besides these a large number of dwellings were built in the suburbs, making a total of about 100.

#### NORTHERN CENTRAL R. R. CO.—ANNUAL MEETING OF THE STOCKHOLDERS.

The stockholders of this Company held their annual meeting Feb. 3, at the Calvert Station, whereupon the President, Zenos Barnum, Esq., read his annual Report, which follows. Mr. James Dall was called to the chair, and Mr. Robert S. Hollins appointed Secretary. On motion the stockholders proceeded to an election for twelve Directors to manage the affairs of the Company for the ensuing twelve months, which resulted as follows: Phillip Dougherty, James Frazier, John Herr, Anthony Kennedy, William H. Keighler, Eli Lewis, Robert M. Magraw, Lloyd N. Rogers, Thomas Winans, Francis White, Wm. E. Maybaw and John B. Packard. It seemed to be understood at the meeting that the present President would be re-elected.

#### ANNUAL REPORT OF THE NORTHERN CENTRAL RAILROAD COMPANY, 1858.

*To the Stockholders of the Northern Central Railroad Company:*

GENTLEMEN:—The board submitted for your information, the Third Annual Report, which will exhibit the financial condition of the company, and the progress of the work of construction for the year ending December 31, 1857.

For a full and minute exhibit of the operations of the company for the year, reference will be had to the financial statements of the treasurer, and the reports of the heads of the several departments hereto appended.



From statement B it will be seen that the gross revenue for 1857 was.....	\$731,688 14
Gross expenses.....	448,404 00
Net revenue.....	\$283,284 14
It will be seen from statement C that this sum has been further augmented by rents and dividends.....	10,310 03
	\$293,594 17

## DISBURSEMENTS.

Paid interest on bonded debt.....	\$233,669 66
Paid dividend and sinking fund due W. Y. & G. R. R. Co.....	13,944 60
Paid interest on bonded debt of said company.....	6,888 40
Paid damages on account of accident on Baltimore & Susquehanna R. R. on 6th of March and 4th of July, 1854.....	8,863 49
Paid interest and exchange.....	3,745 23
Balance.....	267,111 38
	\$265,462 70

The cost of operating the road for 1857, in the ratio of expenses to receipts, exceeds that of 1856, 6.68-100. The board, in anticipation of the early completion of the road to Sunbury, and consequently a large increase of business therefrom, deemed it not only important, but imperative, that the most ample preparation should be made for its accommodation and despatch. At the company's shops extra force was employed in rebuilding locomotives, passenger and burden cars, and large expenditures were made in the renewal and repairs of roadway between Baltimore and Bridgeport. Upwards of twelve miles of new iron track were laid on this section of the road, and 39,546 cross-ties renewed, all of which has been charged to working expenses. An additional, and the most prominent, cause of the increase in transportation expenses was found in the cost of operating the upper section of the line, as a separate and distinct road. Besides the heavy expenses thus incurred a large sum was paid for road and bridge tolls to other companies and charged to the same account. Upon the completion of the bridge over the Susquehanna river—and we take great pleasure in announcing to the stockholders that this most desirable result will be realized early in March—these items of expenses will not only be saved, but the efficiency of the transportation department will be largely increased on the line of road to the point of extension.

It has been the policy of this company, since its organization, to prosecute the work of construction, to completion as rapidly as the finances of the company would admit. The work might have been pressed forward with greater energy, but a due regard to the interests of the shareholders and bondholders required great caution and prudence in this respect, as the board had nothing to rely on, except the net earnings and credit of the company.

It may be inappropriate, at this time, to briefly review the operations of the road, and its management since the consolidation of the several companies. Many doubted the ability of this Company to comply with the obligations it had assumed.

The reports of the Baltimore and Susquehanna and the York and Cumberland Railroad Companies for the year 1854 showed that the total amount paid by these two companies on account of interest and bonds and dividends was only \$52,567.50, and by the same reports it was shown that the consolidated company had assumed the payment of an annual interest to the State of Maryland and bondholders amounting to \$158,376, and liabilities to the amount of \$106,440, besides a large amount of claims, pending and unsettled on account of accidents on the Baltimore and Susquehanna railroad on the 6th of March, and 4th of July, 1854.

With this exhibit of the liabilities of the consolidated Company, the directors commenced the work of establishing a credit, through which to provide the means to meet existing obligations and to pay interest on bonds, to be created and applied to construction. In 1855 the net revenue amounted to \$282,182; in 1856 to \$301,980.25; and in 1857 to \$283,284 14—making a total of \$867,446.39.

Of this sum there was applied to the payment of interest on debt in '55, \$132,237; in '56, \$191,222.03; and in 1857, \$233,669.66—making the gross sum paid under that head \$557,128.69, leaving a balance of surplus net revenue for the three years, as stated, of \$310,317.70. The following statement will show the disposition of this balance.

Interest on W. Y. and G. R. R. Bonds and Debt—(balance).....	\$29,231.80
Rolling Stock—locomotives, 8.....	\$88,327.16
Coal cars, 575.....	100,840.00
Pass. B. & M. cars.....	2,758.40
Freight cars.....	16,344.06
	212,279.62
Real Estate.....	8,558.56
New Road.....	20,461.89
Balance, represented by increased funds.....	39,733.42
	\$310,317.70

During the same period the company have appropriated \$150,975.34 for the purchase of new rails, and \$27,600 for materials which have been used in the renewal of 26 miles of the old road between Baltimore and York, and charged and settled in the monthly current expenses of the repairs of the road department.

## NEW ROAD.

The first section, from Bridgeport to Marysville, the junction with the Pennsylvania Railroad, 8½ miles in length, is nearly completed, and in operation for tonnage as far as the connection with the Pennsylvania Railroad Company's bridge. At the junction between the Northern Central and Pennsylvania roads, measures are being taken for the erection of a commodious passenger station, which is indispensably necessary for the comfort and accommodation of the passengers, by which greater dispatch will be given to the trains in that service.

The Susquehanna bridge, connecting the road on the western with the road on the eastern side of the river, is completed with the exception of four span of the superstructure, and, heretofore as stated, will be finished early in the month of March.

The second section, comprising that portion of the road between Dauphin and Millersburg, a distance of 18.80-100 miles, was finished in January, 1857, and has been operated since that period.

The third section, from Millersburg to Treverton bridge, a distance of 15.40-100 miles, was completed, and opened for business in July last.

The fourth section, between Treverton bridge and Sunbury, a distance of 10.80-100 miles, is now under contract, in the hands of efficient and responsible parties, who are required by the conditions of their contracts to do the graduation, ballasting and masonry on their respective sections. This part of the work is in such a state of forwardness as to make it necessary for those engaged in the superstructure to press that description of the work with energy. The grading, ballasting and masonry on this section is done at fair prices, and payable in the bonds of the company at par. The board feel satisfied that from the present condition of the work and the reliability and energy of the contractors,

the road will be open and ready for business during the month of June.

## THE CANTON EXTENSION.

This part of the work has not progressed with that rapidity which its importance to the trade of the city demanded. At every point on its line, with but few exceptions, the efforts of the Company have been seriously embarrassed by tedious and perplexing litigation in securing the right of way, and the board now regret to say that the work has been finally stopped by legal proceedings.

The following statement exhibits the total expenditures, prior to, and since consolidation, for account of construction of road from Bridgeport to Sunbury, and from Rockdale to Canton, up to 1st January, 1858.

Bridgeport to Sunbury, prior to consolidation.....	\$750,255 20
Bridge over Susquehanna river prior to consolidation.....	31,061 66
	\$781,316 86
Balance due on above, paid since consolidation.....	19,302 35
Bridgeport to Millersburg since consolidation.....	688,907 20
Millersburg to Treverton bridge, since consolidation.....	455,318 58
Treverton bridge to Sunbury, since consolidation.....	40,418 82
Bridge over Susquehanna, since consolidation.....	184,909 65
Engines.....	77,408 74
Trimble's patent rail fastening.....	26,934 27
Engine & station houses, siding.....	4,372 17
Canal extension.....	297,610 37
Real estate and right of way.....	18,663 00
	1,813,845 15
	\$2,595,162 01
To which add interest on loans Nos. 5, 6 and 7, for construction, and paid since consolidation.....	245,923 69
	\$2,841,085 70

Derived from the following means:	
Loan No. 5—\$500,000 issued.....	\$500,000 00
Loan No. 6—\$300,000 ".....	292,300 00
Loan No. 7—\$2,500,000 ".....	1,435,000 00
Temporary loans.....	300,024 03
Cash advanced from revenue acct.....	260,387 99
	\$2,793,712 03

Per centage due contractors payable in bonds...\$47,573 68

The attention of the citizens of Baltimore has been so often called to the importance of the trade which must pass over the line of this road on its completion to Sunbury, and its superior advantages as a commercial avenue both for tonnage and travel, arising from its location and connection with other works, that repetition at this time would be unnecessary.

We do not however, consider it out of place to submit the following comparative table of distances between Baltimore and the points mentioned by the Northern Central road when completed, and the route now traveled by those seeking pleasure, or having business with either this city or the national capital. The time and distance saved are striking.

	Via	Via	Distance
	C. R. R.	N. York.	Saved.
From Baltimore to N. C. R. R.			
Elmira.....	256	459	203
Owego.....	293	423	130
Binghamton.....	315	401	86
Canandaigua.....	320	628	288
Rochester.....	355	558	203
Batavia.....	375	578	203
Syracuse.....	395	477	82
Niagara Falls.....	429	697	105
Oswego.....	430	512	82
Buffalo.....	505	609	203
Dunkirk.....	443	306	163

Any estimate which the board would make of the business of the approaching year must be conjectural, but they feel justified from the past operations of the work, thus far so successful, in assuring the stockholders and giving it as their confident belief that on the completion of the road the revenues must reach a point which under economical and judicious management, will enable the company to declare and maintain regular dividends.—*Baltimore American.*



## PENNSYLVANIA RAILROAD COMPANY.

The annual meeting of the stockholders of this company was held at Philadelphia on Monday morning.

The Secretary read the annual report of the Board of Directors. The report opens with an allusion to the cheering prospects of the Company at the time of the rendition of the annual report of the last year. It then speaks of the crisis, and to the unexpected financial trouble attributes the non-payment of the last dividend. By this non-payment, however, the permanent interest of the stockholders were secured and furthered. The May dividend, it was announced, would be paid.

It has been urged that the suspended dividend should be divided among the stockholders in convertible scrip, but it has not been thought sound policy to do so at present. At a later period this disposition of these profits may be advisable.

The earnings of the road during the year, as reported by the General Superintendent were.....	\$4,855,669.76
From which deduct tolls paid Philadelphia and Columbia (State) Road, to July 31.....	\$239,385.97
Harrisburg & Lancaster R. R. 224,249.71	
Northern Central R. R. 46,901.17	
Philadelphia City R. R. 5,303.99	
	\$516,840.84
Leaving the business of the Pennsylvania R. R. proper .....	\$4,330,828.92
From this deduct transportation expenditure and tonnage duties.....	2,484,902.05
	\$1,845,926.86
Surplus earnings of the road for 1857.....	\$1,854,926.86
From which deduct the following items, not included in the statement of the General Superintendent:	
Interest on Funded Debt, as it stood Jan. 1, 1858, which is more than it averaged for the year.....	\$444,776.48
Expenses of general office, &c. 38,430.94	
State tax paid on Stock & Bonds 55,806.42	
Balance of rent account.....	25,513.67
Difference in interest on bills payable and receivable, say. 34,000.00	
Five months of accrued interest on purchase of Main Line, Jan. 1.....	156,250.00
	754,775.91

There is a balance of..... \$1,100,150.95

which is more than sufficient for a dividend of eight per cent. upon the capital of the company.

On August 1st. the Main Line was transferred to the Pennsylvania Company. The Report sets forth the terms of payment, and states that the terms have been fully complied. The purchase embraces canals, branch railroads, &c. The canals were found to be in a dilapidated condition, having suffered from recent freshets.—The railroad between Johnstown and Hollidaysburg possesses no value, except for its materials of construction. Large amounts have been expended in repairs to the Main Line since its purchase, and the tracks are now in good order. The State made no repairs for seven months previous to the sale. The accommodations are stated to be somewhat deficient for passengers on the local route of the old line, but this will soon be remedied.

The Pittsburg, Fort Wayne and Chicago Railroad have brought their road to the east side of the Ohio river at Pittsburg, but have not yet connected it with the Pennsylvania road.

It being the policy of the Pennsylvania Railroad to aid Western roads, assistance has been extended to several of them, viz: the Cincinnati and Marietta, and Pittsburg, Fort Wayne and Chicago Railroads.

The report concludes with an allusion to the increasing trade of the line, and the benefits which it is apparent will in future result to the stockholders.—*American*.

## STATISTICAL, BOOK-KEEPING—AUDIT.

A valuable contribution to the literature of commerce has been made by Mr. Frederick Krepp, of Bradford. The work of this gentleman applies the science of statistics to book-keeping, by the establishment of a perpetual analysis, which condenses and tabularises transactions as they occur. It is not easy, of course, to give an idea of this comprehensive system, either as to its utility or simplicity, but certain we are that neglect, as well as fraud, could be extirpated from railway accounts were the system adopted. Much skill and labor appear to have been employed in explaining and providing examples of the various applications of the new system. Mr. Krepp tells us in his preface that a few years ago he introduced his system into one of the largest importing houses in New York; and although at first it met with little favor, its advantages soon became apparent, and the principal writes him as follows:—"Our books continue to be kept entirely according to your method, which appears every day to greater advantage. Should you ever make any fresh improvements in this department, please let us know." This system could easily be introduced and engrafted upon others now in use. One of its important features is the advantage which it gives the head of a large establishment, in being able, by a short inspection of his ledger, to ascertain the actual condition of his affairs, without having to wait until the usual balancing and stock-taking. While referring accountants and others who profess to understand this subject in all its bearings, we offer to the less initiated the reflections of the author on his method of audit, which is based on organization, divisions of labor, and systematic co-operation, in the shape of an irregular monthly rotation of auditors:—

"Several concerns, not being competitors, such as a railway company, a bank, an insurance company, &c., instead of having each special auditors of their own, should appoint a joint auditors, consisting of a number of well-qualified gentlemen, sufficient for a monthly adjustment of all their accounts,

"These auditors might distribute the various concerns amongst themselves, every month, by irregular rotation, by ballot for instance. If all accounts were kept on an uniform system, there could be no inconvenience in this continual change of auditors, because each auditor would feel equally at home with every concern.

"Again, it might be made a rule, that every monthly auditor should revise the audit of his predecessor, so that, should an error have escaped, or any irregularity have been committed, it would be sure to be discovered the following month. This rule being quite general, and its personal application subject to the chance of the ballot, it could not for a moment be considered to reflect upon the character of even the most punctilious; on the contrary every rightminded man would cheerfully concur in a measure the obvious and only aim of which would be the increased safety and ultimate benefit of all parties concerned. The monthly audits should be so arranged that, on being joined at the end of the year, they would dovetail into each other, and form a complete and authoritative audit of the whole period.

"To avoid statistical returns being tampered with, after an audit has taken place, say by altering a 1 into a 4 or a 0 into 6 or 9, or in any other way, the following plan is suggested. Let each first auditor repeat, in letters, the

figures of the return he has found correct, and write this repetition with an indelible ink, resisting both erasure and removal by chemical applications. A return would thus be kept in the following manner:—

Monthly Rotation of Auditors.			
1858.	Totals.	Repetition.	
		Thousands.	Hundreds.
January.....	£20,015 6 7	Twenty	Nine
February.....	21,318 4 1	Twenty-four	Three
March.....	21,009 7 0	Twenty-one	Six
April.....			
May.....			
June.....			
July.....			
August.....			
September.....			
October.....			
November.....			
December.....			
Total.....	£245,603 4 8	Two hundred forty-five.	Six.

"Suppose an auditor had allowed himself to be cajoled, bribed, or cowed, into what is termed a 'polite audit,' there would still be the chance that his successor would prove a man of sterner mould, and neutralize the effects of the other's timidity or want of principle. One or two auditors might, perhaps, be bought up; but it would be a moral impossibility to suborn a whole auditors, composed of ten or twenty independent gentlemen, every one of whom would be able, single-handed to checkmate a conspiracy, or denounce, expose, annihilate a rotten concern, long before it could reach the point of disaster ultimately attained by the Royal British Bank,

"The rotation being irregular, there would be no chance of collusion, or of any combination between a facile auditor and culpable parties; nor could an auditor easily be got into the grasp of a powerful defaulter."—*Railway Times*.

CHICAGO, ST. PAUL & FOND DU LAC R. R.  
—The earnings of the Chicago, St. Paul and Fond Du Lac Railroad for the three months ending with December, were as follows:

October.....	\$50,805.75
November.....	38,908.69
December.....	25,313.67

Total.....\$115,028.11

The road has 120 miles in operation. The expenses are estimated at 45 per cent. on the receipts.



This great work has been completed mainly by the resources of the State, and the State is really more interested in the steady and uninterrupted operation of the canal than in any revenues she may in future receive. The probability of the more efficient and successful prosecution of the work in private hands, possessing the requisite means to carry forward the enterprise, and governed by a permanent policy in relation to it, and thereby promoting the trade and business interests of an important portion of the State, are considerations to be viewed in close connection with the measure, and decided as your judgments may dictate.



## RELATIONS OF GOLD AND SILVER.

THEIR RELATIVE POSITION AS THE CURRENCY OF THE WORLD—HOW AFFECTED BY THE DISCOVERY AND WORKING OF THE CALIFORNIA AND AUSTRALIA MINES.

The substitution of gold for silver in this State has gradually crept upon our community and bank managers unheeded, and has been the natural consequence of an extraordinary revolution in the products of the precious metals used to measure the value of things, which has completely deranged their habitual comparative value and turned silver into merchandise, wherever Governments have not interfered. A few extracts from a pamphlet of Michel Chevalier, published in the *Revue des Deux Mondes* 1st of October last, will at a glance show the truly wonderful change wrought by the California and Australia mines in the space of seven years, compared to the products of gold from all sources since the discovery of America:

	Kilogrammes.
Supply of pure gold per annum from all parts since commencement of this century to 1840, about.....	24,000
Supply since the workings of the Oural and Siberia mines to 1848, about.....	48,000
Supply since the workings of the California and Australia mines, average for six years per annum, about.....	300,000
Supply for ten years from commencement would be.....	3,000,000
Products of pure gold from all parts from 1492 to 1848—356 years.....	2,910,000
Value of one gold kilogramme 3,444 44 francs.	
Products of pure silver per annum from commencement of this century, about.....	900,000
They are now estimated at.....	1,000,000

This is the place to show the effects in the great commercial centres of the world, of so abrupt a change in the relative position and production of these two metals.

FRANCE.—Silver is the standard in France, but gold is also coined and allowed to pass for whatever value the market assigns to it.

Up to 1850 gold was the merchandise, and was worth a premium, and silver was the currency. With the avalanche of gold bullion since, from all parts, gold has gradually become the currency and silver is now the merchandise. The following figures are quite significant of the future if left to work its own way:

	Francs.	Francs.
Coinage of gold 1850 to 1856—7 years.....		2,177,132,265
Being an average in round numbers per annum of.....	311,000,000	
Coinage of gold from 1800 to '48. Being an average per annum of.....	24,700,000	
Silver coinage from 1850 to 1856. Being an average per annum of.....	45,693,000	
Silver coinage from 1840 to 1848. Being an average per annum of.....	81,065,000	
Imports of silver from 1846 to 1849.....	769,910,740	
Exportation, same period.....	211,008,820	
Balance in favor of France.....	558,901,920	
Imports of silver from 1850 to 1856.....	949,383,840	
Exportations, same period.....	1,570,129,789	
Balance against France.....	620,745,940	

The three last years have shown even a larger amount against France, say, 331,000,000 of silver imported against 975,000,000 exported. It is self-evident that the extra abundance of gold in France is rapidly draining out of that country of silver which, becoming comparatively scarcer and scarer every day, will soon disappear altogether as currency, unless stopped by the intervention of Government. And all this astounding reciprocal displacing of the metallica has been wrought within a period of hardly six years, for, up to 1850, silver was the only currency in France, gold then bearing a premium which made it merchandise.

HOLLAND.—With her practical good sense and usual foresight in bullion matters, provided the remedy from the very commencement, and "demonetised" gold as early as 1849, whereby silver then became the only legal tender, and gold coins which yet continue to circulate, fluctuate in the market as merchandise.

BELGIUM.—Has followed the example of Holland, and so has

THE EAST INDIA GOVERNMENT.—By issuing notice so early as the close of 1852, "that from and after 1st January, 1853, gold coins, would not be received for taxes or other payments due to the Government," and hence one of the causes of the drain of silver for the East.

SPAIN.—Has lately "demonetised" all foreign gold coins, with a view, it is believed, to go soon a step further in order to retain her silver currency, which would otherwise be soon absorbed by commerce.

ENGLAND.—Her standard up to 1816 was gold and silver. She then adopted the scarcer and most costly of the two metals, as her standard for all large payments, and made silver a legal tender for small payments, say not exceeding forty shillings. By this expedient both metals were retained in circulation, and silver continued to be rated somewhat over its intrinsic value, compared to gold, in order to prevent its being used by the public for any other purpose than as a small currency. Thus 1 lb. Troy or 12 oz. of the metal for English silver coins, contains 11 oz. 2 dwts, pure silver, and 18 dwts alloy—about thirteen and one-third per cent. premium.

This same standard for silver, with the exception of about sixteen years during the reign of Henry VIII, has existed from the conquest to present times. The above pound is coined into 66 shillings. (See McCulloch, page 322, edition 1856.)

Gold standard since 1633: 11 parts fine gold, and one part alloy—say 22 carats.

Mint price for one pound Troy of gold, £46 14s. 6d., or £3 17s. 10½d. an ounce. (McCulloch, p. 321.)

The Bank of England is authorized by its amended charter of 1844, to hold one-fourth of its bullion in silver.

Time will show if the rate for silver coinage, fixed in 1816, with a view to retain it as currency, will suit present times when relative positions are completely reversed, gold having become the extra abundant, and silver the comparatively scarcer and dearer metal. No doubt the moment silver coin is found profitable for export or for melting, the British Government will adopt the same rule which has been found to work so well since 1816: to wit, to rate her silver coinage somewhat over its present value in order to save it from the melting pot or from export.

The Bank of England is bound by law (1844) to give its notes for gold at £3 17s. 9d. per ounce, and gold for its notes at £3 17s. 10½d.

UNITED STATES.—From the establishment of the mint, in 1792, when the proportional value of gold to silver was fixed at 15 to 1, up to the 26th of February last, both metals of home or foreign coinage have been used as "legal tender." Our only "legal tender" now is "gold" of our own coinage, for all payments, and our small silver coin for sums not exceeding \$5. Up to 1848, Spanish mill and Mexican dollars were *de facto* the only currency throughout the Union, gold being then scarce and worth a premium.

The following comparative statements of our coinage, from the commencement to 1848, and then since the working of the California mines, will explain better than words can do, the rapidity with which, without any interference on the part of the Government, "gold" became the currency, and silver the merchandise:

	Gold.	Silver.
From 1793 to 1848—55 years....	\$ 76,580,305	\$73,206,861
1849 to 30th Sept. 1855, less than 7 years.....	308,925,240	26,345,443
	\$385,505,545	\$99,552,404

So rapid was the change, that when the mint law of the 21st of February, 1853, was passed, Mexican dollars were already selling at a good premium for gold, and Congress was actuated, no doubt, by the same idea and purpose which induced the legislation and measures of Holland, the East India Company and other countries, to guard their silver currency against absorption by commerce. This law authorizes the usual subdivision of the Dollar at a nominal value exceeding the intrinsic value thereof about 6.91 per cent. prem., as follows:

	Jan., 1837.	Act of Feb. 21, 1857.
Dollar.....	412½ grains; no change.	
Half Dollar.....	206¼ " 192 grains.	
Quarter Dollar.....	103¼ " 96 "	
Dime.....	41¼ " 38.25 "	
Half Dime.....	20¾ " 19.14 "	

And also the purchase of Bullion for this coinage with the Bullion fund of the mint.

The price fixed by the mint, in accordance thereto, for Mexican Dollars, is \$1 22, which at the fineness of 897 and 898 thousandths is within a small fraction of 6 per cent. prem. The bullion fund in question was created by an act of Congress in 1837, and was to the following effect:

SEC. 31. That for the purpose of enabling the Mint to make returns to depositors, with as little delay as possible, it shall be the duty of the Secretary of the Treasury to keep in the said mint, when the state of the Treasury will admit thereof, of a deposit of such amount of public money or of bullion procured for the purpose as he shall judge convenient and necessary, not exceeding one million of dollars, out of which those who bring bullion to the mint may be paid the value thereof as soon as practicable after the value has been ascertained.

By an act of May 23d, 1850, it is provided:

SEC. 1. That for the purpose of enabling the Mint and Branch Mints of the United States to make returns to depositors with as little delay as possible, it shall be lawful for the President of the United States when the State Treasury shall admit thereof, to direct transfers to be made from time to time to the Mint and Branch Mints, for such sums of public money as shall be judged convenient and necessary, out of which those who bring bullion to the Mint may be paid the value thereof, as soon as practicable after this value has been ascertained.—*New Orleans Bulletin.*

GOVERNMENT EXPENSES.—The expenses of the Government for the past year are stated by the Secretary of the Treasury, in the document accompanying his Annual Report, to have been as follows:

Civil list.....	\$ 7,207,112 42
Foreign intercourse.....	1,019,435 16
Miscellaneous expenses.....	19,305,374 79
Department of Interior.....	5,358,274 72
Department of War.....	19,261,774 16
Department of Navy.....	12,795,856 69
Public debt, redeemed and interest.....	5,943,696 91
	\$70,892,724 85

Receipts during the year.

From Customs.....	\$63,875,905 05
Sales of Public Lands.....	3,829,456 64
Incidental sources.....	926,121 98
	\$68,631,513 67
Bal. in Treas'y, July 1, '56..	19,901,325 45
	88,532,839, 12
Balance in Treasury, July 1, 1857.....	\$17,710,114 27



**Editorial Correspondence.**

ALBANY, Feb. 6, 1858.

DEAR RECORD—I am staying a day or two in the capital of the Empire State, and thought perhaps your readers might be pleased to hear from a truant there. The railroads over which I have traveled are in excellent order. The absence of any thing approximating frost during this whole winter, has rendered it a very favorable season for railroading. All the companies in the State are congratulating themselves upon the fact that while their receipts are somewhat less than for the corresponding period last year, their expenses are so much reduced that the net earnings show an increase. The New York Central Railroad alone shows an item of saving over last January of \$3,000 for snow shoveling. This added to the saving in broken wheels, rails and machinery, makes a tolerably respectable saving even for a road representing nearly forty millions of capital.

The Railroad Commission of this State has been abolished on account of political motives, much to the regret of those railroad managers who desired to act for the best interests of those they represented, and to the inexpressible joy of those who believe that the management of corporations is a matter which concerns them alone and about which the public has no right to know. The duties of the Railroad Commissioners are now attached to the office of State Engineer who is allowed a deputy for that purpose. This office (deputy) is now filled by Prof. Perkins, well known for his mathematical works and his former position as principal of the State Normal School. Prof. Perkins brings to the position a vast amount of information and a thorough book knowledge of the subject. We do not know, however, that he has had much field experience. He will make a faithful and competent officer.

The fact of the abolition of the Railroad Commission of this State has been seized upon by some of the Press for the purpose of crying down all attempts at legislative control over the roads. This was not the design of the legislature in repealing the law creating the Commission. The experience of the few years in which it was in existence was too valuable to be thrown away, and afforded too many evidences of its usefulness to countenance for a moment the idea of abandoning legislative control over an interest now swelled to be one of the largest, if not absolutely the largest in the State. And accordingly the duties of that Commission have been provided for as before named. As an instance of the usefulness of the Commission, I may mention a single fact in its history without giving names. The attention of the Commissioners was drawn towards a certain railroad company, having an office in New York city and making large dividends, but delinquent in its reports. The Commissioners, by virtue of their authority caused an examination to be made of its books, and during the process of examination were treated to all sorts of abuse by the very men whose interests they were attempting to protect—the stock-

holders. They considered it an unwarrantable interference with the private concerns of the company—a movement which would seriously affect the value of their stock, and as such protested against it. The Commissioners, however, proceeded to the bottom of the matter, and revealed the startling fact that this company had been making dividends out of money for which it paid at the rate of *three per cent. per month*. And that a few months longer continuance of the same system would render the company hopelessly bankrupt. The result was a change of management and thorough reform, which saved for the holders of the stock the balance of value which would soon have been sunk under its previous management.

With facts such as these strikingly exemplified, who shall say that a Railroad Commission composed of honest and capable men, is not a comparative safeguard to the stockholders in our railroad companies. They must step in and do what stockholders themselves are either unable or unwilling to do, and the only regret that should be felt, should be that they have not the time to do this thing for every road as thoroughly as could be desired. Many of our roads in Ohio would be benefitted by a thorough overhauling, and we trust the Legislature will confer on somebody the power to do it. It will not do to say that the affairs of corporations are private matters and belong to themselves. There is not a man in our country but what is liable, under the changes and chances of business to be made, willingly or unwillingly an owner of stocks, controlled by directors already elected, and who may have the means of perpetuating their power in spite of individual opposition, even were it made. The action of stockholders can only be based upon the meagre representations which the management may be pleased to give, and these statements, meagre as they are, may be so garbled as to deceive even the wary. What is needed is a power which can go beyond, and sift matters to the bottom. Such a power can only be attained by combined action on the part of stockholders, which is rarely had, or by legislative control, which can be had by suitable enactments. W!

**CINCINNATI STOCK SALES,**

AT THE STOCK BOARD,

**MERCHANTS' EXCHANGE,  
AND AT PRIVATE SALE.**

BY HEWSON AND HOLMES,

February 10, 1858.

**BONDS.**

\$15,000 Little Miami R. R. Co. 6 per cent	
1st Mortgage Bonds. ....	75
\$2,000 Little Miami R. R. Co. 6 per cent.	
1st Mort. Bonds. ....	75 and int.
\$6,000 Cov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds. ....	56½
\$5,000 Ohio & Miss. R. R. Co. Construction	
Bonds. ....	33½
\$2,800 Col. & Xenia R. R. Co. Dividend	
Bonds, '60, '61 and '62. ....	85
\$1,000 Indianapolis & Cincinnati R. R.	
Co. 2d Mort. Bonds. ....	75
\$3,000 City of Lexington, Ky., 6's. ....	60
\$1,000 City of Cincinnati 6's. ....	85
\$5,000 Hillsboro & Cincinnati R. R. Co.	
1st Mort. Bonds. ....	25
\$1,980 Little Miami R. R. Co. Dividend	
Scrp. ....	73 and 73½
\$7,500 Certificates of Dep. in Ohio Life	
Ins. & Trust Co. Bank. ....	34 and 35

MEMPHIS AND CHARLESTON R. R.—The following are the comparative earnings of this road for the months of July, August, and September of the years 1856 and 1857:

1856.	
July. ....	\$31,584 10
August. ....	30,661 14
September. ....	42,729 43
	\$104,974 67
1857.	
July. ....	\$67,288 81
August. ....	72,596 52
September. ....	84,695 18
	\$224,580 51
Same months 1856. ....	104,974 67
Increase. ....	\$119,605 84

**MONETARY AND COMMERCIAL.**

The resumption of specie payments during the last week by the Banks of Pittsburgh, Philadelphia, Baltimore, and the District of Columbia, has had a genial influence on money matters at the East. The Courier and Enquirer says, "that Capital is abundant for business, and for business paper of the best stamp. Loans on call with stock collaterals are granted readily, and the Banks complain of having idle funds."

Money was obtainable in London, three weeks since, on collaterals of Consols, at two per cent., a rate lower than has been known for some years.

The New York Bank statements for last Monday show a decline in coin of only half a million, the foreign exports of the week being nearly three millions, and nearly another million having been sent to Philadelphia, Baltimore, and other cities. The weekly statement on the whole is considered satisfactory.

On Monday the New York Stock market was only moderately active. The advices from Europe are favorable to a continuance of their present high prices.

Exchange on New Orleans is scarce, and is selling at ½ to 1 prem. On the East it is abundant, and dull at ½ to 1 prem. Treasury notes are bought at par by our Bankers; in New York they are ¼ to ½ discount.

There is a bill now before the Legislature of New York for the suspension of the usury laws for a term of three years, commencing on the first day of July next. This is rather ridiculous, why not abolish them at once. However, we have no idea that it will pass, as there has been similar measures before that body every session for the past twenty years. The country members as a body are decidedly opposed to any such innovation on those "salutary regulations" and "time honored laws and usages," that have been handed down to us almost from the days of Moses. A bill has also been reported to the Massachusetts Legislature, prohibiting the issuing or paying out of Notes of a less denomination than five dollars, under a penalty of one hundred dollars, and that no person shall tender in payment, pass or circulate any bank note of less denomination than five dollars, under a penalty of twenty-five dollars for each offence. It also provides that every bank shall be required to keep of specie, one-fifth of its aggregate liability for circulation and deposits, and that whenever the amount of specie is less than one-fifth, it shall be unlawful to make loans or discounts, until the proper proportion is restored.

The Senate of Kentucky has passed an act to prevent the banks from taking usury under the guise of exchange. It also provides for the publication of monthly reports.

Hewson & Holmes in their circular say:

The movement of the Stock and Money market in the last week is fully up to our expectations, confidence is daily becoming stronger and more widely diffused, money is comparatively easy and negotiations of first class paper is readily made at 10 to 12 per cent., while second and third class names are very difficult at very high rates. Mercantile collections are improving and the general aspect of trade wears a more cheerful appearance. The sales of Railroad securities have been on a moderate



scale, and at prices varying but little from those reported in our last circular. Among the sales we notice Little Miami 6 per cent. bonds at 75 and interest, closing sale, which is a slight improvement. Covington & Lexington 2d mortgage 7's (at 56½, an improvement of 1 per cent.) over sales of last week. Indianapolis & Cin. 2d mort. 7 per cent. at 75. Certificates of deposit in Trust Co. 34 and 35.

In shares we have sales of Little Miami at 72@73; Columbus & Xenia at 70 to 72; Indianapolis & Cincinnati at 40, and Farmers Bank of Kentucky stock at 106. In Hamilton & Dayton securities, we hear of only one small sale of its stock at 40. The holders of this stock seem content to wait the result of the controversy between that road and the Mad River, rather than force their securities off at low prices. We are not advised of any change in the relations of the two roads from that alluded to in our last Circular.

Eastern Exchange is in large supply at lower rates. The general selling rate for Bankers Checks is 1 per cent., though purchases have been made at ¾ prem. New Orleans sight funds are scarce at 1 per cent. prem. Gold is dull and without demand. Treasury notes go very readily at par. A very extended circulation for these notes will no doubt be found in the West, where they will be every where received with favor.

## MACKINAW CITY.

"If one were to point out on the map of North America, a site for a great central city in the lake region, it would be in the immediate vicinity of the Straits of Mackinaw. A city so located would have the control of the mineral trade, the fisheries, the furs, and the lumber of the entire north. It might become the metropolis of a great commercial empire. It would be the Venice of the lakes."—*Ferris' States and Territories of the Great West*, page 183.

"As the center of one of the richest mining regions in the world, as the northern terminus of one of the longest lines of railroad in our country, and the practical western termination of the great system of Canadian railroads now aiming at this crossing ground, as the natural harbor for a lake region whose commerce is already greatly increasing, Mackinaw possesses elements of growth and prosperity which can not fail to give it importance—an importance probably not behind the fifth lake city in the next twenty years."—*Railroad Record*.

"We have shown Mackinaw in geographical position to be equal to any point in the interior of America, and scarcely inferior to such points as Singapore, or Constantinople. \* \* \* That the site of the town is remarkably good,—that it is healthy. \* \* \* That it has more than the advantages of Cincinnati for manufactures. \* \* \* That in the most important points of comparison, its position is superior to that of Chicago, a city which is the growth of only twenty years;—and finally, that by the grants of the Government already made, here will center a system of Railroads, unrivalled in their magnitude and importance. \* \* \* On this site, so favored by so many concurring advantages, Mackinaw City has been laid, with broad streets, parks of native forest trees, and public grounds adapted to the wants and convenience of what we may reasonably anticipate, as a future city of rapid growth, of numerous population, of industrial arts, of extensive commerce,—presiding over those magnificent lakes—as the QUEEN OF THE NORTH."—*Edward D. Mansfield*.

The undersigned, Trustees for the Proprietors of the Lands of, and adjacent to "Mackinaw City," have the pleasure of presenting, for the consideration of capitalists, business men, and others, what they will concede to be, upon investigation, the most reliable point for investment and settlement, now available in the west or north.

Mackinaw evidently occupies the most commanding natural position for a city of the first class; surrounded as it is, by a widely extended territory, abounding in elements of the greatest wealth, affording the utmost encouragement to the manufacturer and merchant in their widest diversity of employment, and without the possibility of a competing city in any direction nearer than Detroit on the south.

They feel, from what has been so truly said by E. D. Mansfield, Esq., a gentleman well and favorably known

for his ability and habits of close investigation and comparison, that nothing more is left to be said, but to set forth the policy which they have adopted, and design to carry out, the more efficiently to promote the interests of this location, and at the same time to aid in the development of the vast resources of the surrounding region.

From the map it will be seen that streets are laid out eighty feet in width, and the avenues one hundred and one hundred fifty feet, respectively. In the deed of dedication of these to the public, provision is made for side walks, fifteen feet in width on each side, to be forever unobstructed by improvements of any kind, shade trees excepted, thus securing a spacious promenade, worthy of a place destined to become a principal resort for pleasure and health. Provision is also made for the proper use of the streets and avenues by Railroad Companies, adequate to the demands of the business of the city.

The lots, with the exception of those in fractional blocks, are fifty by one hundred and fifty feet, thus affording ample room for permanent, convenient, and ornamental improvements.

The Park now laid off, embraces the grounds of the Old "Fort Michilimackinac," sacred in the history of the country. These grounds, now in their natural condition, are unequalled for beauty of surface, location, scenery, soil, trees, etc., by any Park in any city in this country; and when the skillful hand of the horticulturist has marked its outline and threaded it with avenues and foot paths, pruned its trees and carpeted its surface with green, it will present the very perfection of all that constitutes a Park delightful. The character of the soil,—it being a sandy loam, with sand and gravel underlying it,—renders it capable of the easiest and most economical improvement, securing walks always dry, hard and smooth.

This Park, with suitable blocks and lots for country and city buildings, market houses, schools, etc., will be duly appropriated to these uses, whenever the proper authorities are prepared to select suitable sites; and lots for churches and institutions of learning and charity will be freely donated to parties contemplating early improvement. Thus the Trustees propose to anticipate, by avoiding the errors of older cities, the wants of Mackinaw City in perpetuity, and for ever its citizens from taxation for any grounds required for the public good. They also design to place it in the power of the General Government to secure, by like donation, at an early day, the grounds necessary for such Fortifications as the wants of the country and commerce may require, on the simple condition of speedy improvement.\* This liberal policy, it is believed, will best

\* Mackinaw Island being seven miles distant from the channel between the narrow points—is entirely unsuited to the purposes of fortification. The military position which commands the Straits, is necessarily that which is at the narrowest point, and that principle is adopted on the Delaware, Chesapeake and other Bays. promote the true interests of the city and country, and at the same time be productive of the greatest pecuniary profit, both to the original proprietors, and to all others who may make investments at this point.

It is also within the purposes of the Trustees, to expend a large portion of their income from sales, in providing for the public wants, by the erection of Docks at the most important places, and by the establishment of Ferries, in view of which they have secured the land on the opposite side of the Straits. And they will also, as their means will justify, make loans to aid parties in the establishment of manufactures, etc.

Building materials of great variety and in abundance are at hand. Lumber can be had for mere cost of preparation, and the soil at no very distant point, is suitable for making bricks; while for immediate use, Milwaukee can furnish the articles of the best kind in any quantity. The shores of Lake Superior abound with exhaustless quantities of Granite, Sand Stone, and Marble; and Lime Stone and Sand are on the spot.

There are three harbors, the most eastern of which, is well known to navigators, as affording perfectly safe anchorage at all times; and when suitable docks are built, they will offer unusual advantages to commerce.

The surface of the city itself is unrivalled, having a natural grade suited to city wants, and the soil being a sandy loam with sand and gravel underlying it, will form the cheapest and best foundation for streets and avenues.

Evergreen and other trees of full growth now cover the grounds, affording a healthful and delightful shade, and capable of varied embellishment, without the delay incident to artificial growth. The grounds adjacent to the city are of the same character, gradually ascending until an elevation of seventy-five or a hundred feet is attained, affording the finest views of the Lakes and neighboring islands.

The following are the terms on which the Trustees propose to sell the property which they have subdivided into lots, as represented in the subjoined plat of the city. Notwithstanding the superior facilities of this point over hundreds of others in the west where lots have been readily disposed of at ten, twenty, thirty, and even fifty dollars per foot, the Trustees in order to give impetus to the growth of Mackinaw City, and to afford a margin for others to profit by, propose to all settlers who will immediately improve the property by the erection of mills, hotels, dwellings, manufacturing and printing establishments, docks, etc., etc., to donate the lots necessary for such purposes, subject to the choice of the parties themselves; and to those who desire to profit by the inevitable advance of property contiguous to their own improvements, the Trustees will sell lots on long time, if desired, at the unprecedented low price of five dollars per foot, front.

† To enterprising business men, Manufacturers, Mechanics, etc., who are unsettled by the present general financial revulsion and who think of finding a new home, suited to their enterprise and business, "Mackinaw City" with its natural advantages, and the easy terms now presented of acquiring property, probably offers greater inducements than any point either west or north.

Capitalists and non-residents, desiring to avail themselves of the advantages of such a developing policy, and to invest upon a real estate basis, promising a rapid appreciation in value, can possess themselves for a very limited time, of lots, at the same low price of five dollars per foot.

The title to the property is unquestionable, having within five years, been derived directly from the United States Government, as will be seen by reference to a Title pamphlet issued by the undersigned for the information of parties interested.

Applications by letter will receive prompt attention. Asking a careful perusal of the annexed report on the subject, from the pen of E. D. Mansfield, Esq., (a copy of which will be sent to any party asking for it,) we submit the matter to the public investigation.

EDGAR CONCLING, } Trustees.  
A. M. SEARLES, }

CINCINNATI, OCL. 1857.

### OLD STAND.

## Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

**Locomotive & Hand Lanterns,  
ENAMELLED HEAD LININGS,**

Brass and Silver Trimings,

**COTTON DUCK FOR CAR COVERS,**

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

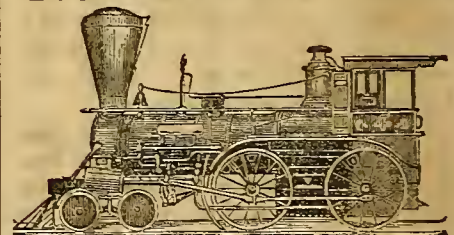
64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES,  
Of the late firm of Bridges & Bro.  
JOEL C. LANE.

feb4fr

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slitting Machinery suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

## IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,  
Manufacturers of

**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES,**  
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

**Warehouse, 85 South Third St.,  
PHILADELPHIA.**

## RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons  
rails 49 lbs. per yard. 1,000 tons rails 55 lbs.  
per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. GOODMAN & CO.,  
Feb. 7. '56-2ml.] no. 7 Wall st., N.



## RAILROAD RECORD

TABLE OF RAILROAD STOCK, CAPITAL, INTEREST, BOND, &amp;c.

Amount of Loan.	Rate of Int'r't.	When Payable.	Where Payable.	When Due.	Description of Bond.	Unit of Bonds.	Name of Company.	Quot' of Stock.	Length of Road.	Capital.	Total Funded Debt.	Gross Earnings.	Nett Earnings.	La. Divide a.
\$1,000,000	6			1860	1st mortgage.	.....	Albion, L. & H. mpr	173	5,000,000.00					
498,800	6			1862-3	2d "	.....	Androscon & Kennebec	54.55	1,400,000.00			209,475.46	110,246.98	none.
199,000	7	July & Jan.			Domestic.	.....	Atlanta and LaGrange.	86.5	1,000,000.00	199,000.00		278,123.74	173,780.74	4 pr. ct. 6m
52,646	6			now	"	.....	B'ngr. Old T. & Milford.	12.5	135,000.00	52,646.26		39,104.40	8,671.61	15,000 in '53
500,000	7		N. Y.	1860	"	.....	Boston & Worcester.	44 5/8	4,500,000.00	500,000.00		1,108,781.90	437,062.03	180,000 4.6m
300,000	7			1866	1st mortgage.	.....	Buffalo & State Line.		1,300,000.00					5 pr. ct. 6m.
200,000	7			1857-9-62	Income.	.....	"							
				1864	Domestic.	.....	"							
577,187	6				4th mortgage.	.....	Central Ohio.							
192,200	7			1872	1st mortgage.	.....	Champlin & St. Lawrence	43	1,872,500.00	1,001,087.00		168,200.00	77,700.00	10 per ct.
380,000	7			1874	2d "	.....	"							
1,440,000	7				Domestic.	.....	Ch'l'r'te & South Carolina.	110	1,750,000.00	380,000.00		291,819.86	47 per ct.	\$72,300
1,300,000	6-7-8		N. Y.		1st mortgage.	.....	Chgo, Burlington & Quincy.	138	3,746,000.00	3,114,000.00		1,093,185.00	571,725.23	15 pr. ct. 6m
374,000	8				2d "	.....	"							
					Convertible.	.....	"							
1,300,000					1st mortgage.	.....	Chicago, Fulton & Iowa.							
532,000					2d "	.....	Cin. W'ling'n & Zanesville	132	1,761,149.16	2,241,500.00		221,491.96		
104,000					3d "	.....	"							
305,500					Income.	.....	"							
540,000	6				Convertible.	.....	Cleveland Col. & Cin.	139	4,741,320.00			1 3/4	700,894	6 per cent.
43,000	7			1873	1st mortgage.	.....	Cleveland & Mahoning.	85	1,500,000.00					
400,000				1864	2d "	.....	"							
1,000,000	7					.....	Cumberland Valley.	52	1,218,300.00			160,311.56	81,101.56	\$33,250.24
500,000	6			1873	1st mortgage.	.....	Dayton & Cin. short line.	52	1,000,000.00	1,000,000.00				
				1857-8-9	1st mortgage.	.....	Eastern Railroad.	93 6-10	3,345,000.00			665,578.79	288,087.84	\$234,133
350,000	7				1st mortgage.	.....	East Ten. & Virginia.	130	625,450.00			30,297.30	19,692.30	
740,000	7			1869	1st "	.....	Essex Railroad.	20	700,000.00			243,970.42	136,061.90	\$133,281.45
88,000	10			1861	2d "	.....	Evansville & Crawfordsville	109	2,228,657.40			206,836.00	176,529.93	3 pr. cent.
400,000	7			1864	1st mortgage.	.....	The Fitchburg (Mass.) R.R.		3,540,000.00			681,162.52	213,837.81	
200,000	10				1st mortgage.	.....	Fox River Valley.	33	800,000.00			50,381.33	14,822.45	\$166,240.00
					1st "	.....	Fair Haven Branch.	15	300,000.00			1,062,302.59	357,689.42	\$166,240.00
100,000	6				1st mortgage.	.....	Georgia R.R. & Banking Co.	233	4,156,000.00			27,676.69	14,207.07	
100,000	6				1st "	.....	G't Falls & Conway R.R.	90	4,191,550.00			339,196.50	176,529.93	8 pr. ct.
300,000	6 1-9			1858	1st "	.....	Housatonic Railroad.	281 1/2	2,000,000.00			1,924,382.44	718,037.40	
4,000,000	7			1869-70	1st "	.....	Hudson River.	74	4,000,000.00					
2,000,000	7			1860	2d "	.....	"	144	4,000,000.00					
11,812,000	7			1875	3d mortgage.	.....	"	144	4,000,000.00					
12,885,000	7			1875	1st "	.....	Illinois Central R. R.	704	18,453,376.00			1,476,035.27	1031,499.08	7 pr. ct.
4,115,000	7			1875	1st "	.....	"	704	3,558,376.00					3 pr. ct.
3,000,000	7			1860	Freeland.	.....	Indiana Central.	72 4-				354,971.00		
600,000	7	Nov. 1			1st mortgage.	.....	"							
700,000	7	Jan. & July 1			2d "	.....	"							
50,000	7			1862	1st "	.....	Iron R. R.	13	123,700.00					
700,000	7				1st mortgage.	.....	Kentucky Con. 2d Div.		719,590.00					
					1st "	.....	Knoxville & Kentucky.					23,233.59	14,233.59	
218,000	7				1st "	.....	Laurens (S. C.) R. R.	32	160,000.00					\$8,000
1,000,000	7			1866	2d "	.....	Louisville & Nashville.	184	300,000.00			50,234.71	14,149.13	10 pr. ct
1,000,000	7			1875	2d "	.....	Lowell & Lawrence.	12 35-	2,697,090.00			587,236.57	162,277.50	
2,000,000	6				1st "	.....	Mad River & Lake Erie.		2,697,090.00					\$24,000
2,500,000	7			1868	1st "	.....	Manchester & Lawrence.	26	1,000,000.00					
2,000,000	7			1874	2d "	.....	Marquette & Cincinnati.							
60,000	7 and 8			1867	1st "	.....	Mexican Gulf R. R.	27						
420,000	8				1st mortgage.	.....	Milwaukee & Horicon.	30						
320,000	8			1881	1st "	.....	Mineral Point R. R.	32						
320,000	8			1-68	2d "	.....	"	32						
6,000,000	6			1864	1st "	.....	Mobile & Ohio.	497	10,000,000.00			253,498.96	162,802.24	
500,000	7			1869	1st mortgage.	.....	Nashua & Lowell R. R.	15	600,000.00			193,752.42	55,501.74	7 pr. ct.
8,356,000	7	May & Nov.	N. York		1st mortgage.	.....	New Haven & Northm'tn	55	923,500.00					2 pr. ct. 6m
32,892,600	6	June & Dec.	N. York	1864	Con. till 1859.	.....	New York Central.	553	23,067,400	14,763,897		7,707,248	3,609,481	3 pr. ct. 6m
1,000,000	7			1873	1st mortgage.	.....	N. Y. & Harlem R. R.	133	6,717,100.00			1,040,393.26	324,891.57	
936,000	7			1864	1st "	.....	" Pref.					64,678.71	\$37,692.30	
411,700	6			1863	1st "	.....	N. Y., Prov. & Boston.	50	1,58,000.00			243,713.00	51,544.40	
500,000	7				1st "	.....	N. Lon. William'tu & Pal.	66	1,700,000.00			120,571.50		\$25,000
300,000	6				2d "	.....	"							
					1st mortgage.	.....	Pontchartrain R. R.	5	500,000.00			116,795.00	366,118.80	7 pr. ct.
1,500,000	6			1873	1st mortgage.	.....	N. O., Opelousa & Gr't West.	62 1/2	6,000,000.00			1,007,666.48		
1,000,000	6			1873	2d "	.....	N. Y. & New Haven.	103 1/2	3,000,000.00					
2,000,000	6			1885	3d "	.....	North Western Va. R. R.							7 pr. ct.
1,500,000	7			1859	1st mortgage.	.....	"							
3,000,000	7				1st mortgage.	.....	Northern (N. Y.) R. R.	118	2,000,000.00			600,000.00		
419,300	5			1877	"	.....	North Missouri R. R.	19 2-				23,170.74	88,458.56	2 1/2 pr. ct.
221,800	6			1860	"	.....	Norwich & Worcester R.R.	60	2,111,500.00			304,236.33		
					"	.....	Ogd'sburg, Clay'tn & Rome							
400,000	6			1866	1st mortgage.	.....	Ontario, Simcoe & Huron	94				289,690.10	137,875.93	5 pr. ct.
1,200,000	6			1875	2d mortgage.	.....	Orange & Alexandria R.R.	89 3-	2,937,500.00			276,539.02		
300,000	7			1868	1st mortgage.	.....	Peoria & Bureau Val. R. R.	47	1,500,000.00					6 pr. ct.
300,000	8			1873	1st "	.....	"							
350,000	6			1861	1st mortgage.	.....	Philadelphia & Trenton.	28 1-5	1,000,000.00					
800,000	7			1864 to 1874	1st "	.....	Portsmouth & Concord.	47						
1,200,000	6			20 years.	1st mortgage.	.....	Potsdam & Watertown.	76	2,000,000.00			68,525.42		
					1st mortgage.	.....	Rutland & Washington.	62 1/2	950,000.00					
					1st mortgage.	.....	St. Louis & Iron Moun. R.R.	86	6,000,000.00					
					1st mortgage.	.....	Salem & St. Louis R. R.	168 3/4	400,000.00					
					1st mortgage.	.....	Snd'sky, Mansf'd & Newk	116				19,050.64		
					1st "	.....	Sullivan Railroad.	26	500,000.00			75,246.06	17,378.08	
					2d "	.....	"							
					1st mortgage.	.....	Tennessee & Alabama.	145				39,586.44		11m. 12. pr. ct
					1st mortgage.	.....	Terre Haute & Richmond	73	1,294,450.00					
				1861	1st mortgage.	.....	Toledo, Wabash & Western	242						
				1840	2d "	.....	Troy & Boston.		1,000,000.00					
				1875	3d "	.....	"							
2,500,000					1st, 2d, 3d "	.....	Vicksburg & Jackson.	46				165,076.04		2 pr. ct.
					1st mortgage.	.....	Virginia & Tennessee.	215	3,000,000.00			322,048.60		
					1st mortgage.	.....	Westchester (Pa.) R. R.	31	105,000.00					
506,000	7				1st mortgage.	.....	Wilmington & Manchester	171						
200,000	7				2d "	.....	Winchester & Potomac.	32						
					2d "	.....	Worcester & Nashua.	45 69-						



## INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



### INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

#### THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jackson, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

### VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

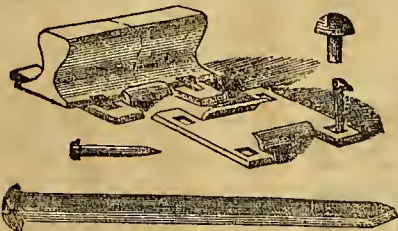
Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

### GREAT WESTERN

## Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

Feb 28 CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

### VIA LAWRENCEBURGH,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855. [Jan-15] Agent.

### APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, C.

## GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

## SUCTION & FORCE PUMP

AND

## Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and in all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—1y

## Norris' Locomotive Works.



### PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,

### LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27. RICHARD NORRIS & SON.

## Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.  
OR SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

### RHINELANDER, BOORMAN & CO.,

## RAILWAY AGENTS

AND

## COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

### Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb-15

## Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer,  
No. 298 H Street, Washington, D. C. apr12

## W. G. HYNDMAN'S



## Patent Portable Forge and Bellows.

THESE FORGES are superior in all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

### THOMAS D. STETSON,

## Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT,  
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oct23

## RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,

feb-15 10 Wall st., near Broadway, New York.

## ALLEN & NOYES' METALLIC PACKING.

## To Whom it May Concern.

NOTICE is hereby given that Charles W. Grawniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees. Jy14, 1857. Jy23-1m

## D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders'.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

D. M. CARHART,

oct29-6m Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO.  
Mathematical Instrument Makers,  
Removed to No. 67 West 6th St.  
CINCINNATI, O.



## Most Direct Route to the East.

## BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH  
PHILADELPHIA AND NEW YORK,  
BY THE  
Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

## ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

## THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

## Fare as Low as by any other Route.

## FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

**FRIGHTS.**—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,  
ap10 Office, Adams Express Co., Third street.

## Terre Haute &amp; Richmond R. R.



## Indianapolis to Terre Haute,

CONNECTING AT Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

## MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

## EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10

Sup't Terre Haute &amp; Richmond R. R.

## PAGES

## PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Handrails, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio  
LEE & LEAVITT.

1857.

November 30.

1857.

## LITTLE MIAMI AND COLUMBUS AND XENIA

RAILROAD.  
EXCLUSIVELY AN EASTERN ROUTE.  
THROUGH TICKETS VIA.

WHEELING,  
STEUENVILLE,  
PITTSBURGH,  
CLEVELAND,  
DUNKIRK,  
BUFFALO,  
NIAGARA FALLS,  
To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

## FOUR DAILY TRAINS.

**FIRST TRAIN.**—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

**SECOND TRAIN.**—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

**THIRD TRAIN.**—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

## FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office south-east corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

## THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no12

H. B. RUGGLES, Conductor.

TO LOUISVILLE  
IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

## OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER NOTICE, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

**FREIGHT.**—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L.

Office No. 2 Burnet House.

'an2

## WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c., executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,  
jan8-ly 119 Walnut st., Odd Fellows' Building

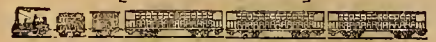
1857.

Summer Arrangement.

1857

## Cincinnati, Hamilton &amp; Dayton

## [TRUNK LINE.]



## RAILROAD,

FOR THE

## NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

## THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,  
PHILADELPHIA, TERRE HAUTE,  
CLEVELAND, ST. LOUIS,  
DUNKIRK, LAFAYETTE,  
BUFFALO, LOGANSPOUT,  
NIAGARA FALLS, CHICAGO,  
NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

## SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

**LIGHTNING EXPRESS** leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day. WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

**INDIANAPOLIS AND LOGANSPOUT EXPRESS** leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

**HAMILTON ACCOMMODATION** leaves at 7:30 A. M. Stops at all regular and flag stations.

**MAIL EXPRESS** leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest for going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

## "STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

**INDIANAPOLIS EXPRESS** leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

**DAYTON EXPRESS** leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

**NIGHT EXPRESS** leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS TRAIN** on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

## FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

## ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

**FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.**

Baggage checked through.

## RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

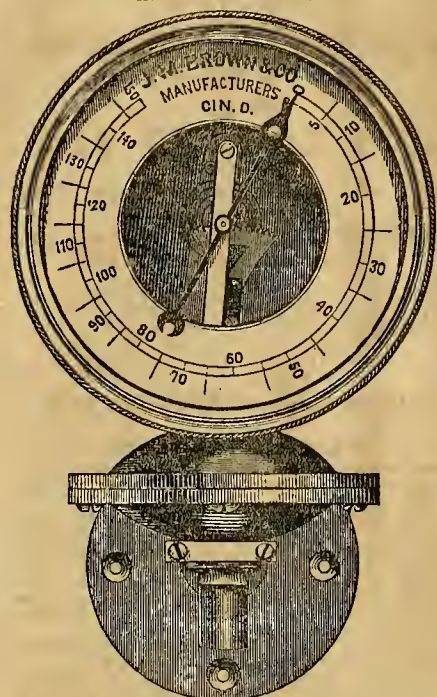
D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH, Agent



**J. M. BROWN & CO.,**  
MANUFACTURERS OF



**IMPROVED**  
**Corrugated Steel Spring Gauges,**  
FOR  
**LOCOMOTIVES AND STATIONARY ENGINES.**

**T**his Gauge is so constructed that when riding over rough roads the Indicator stands perfectly steady, and in this respect is superior to the Ashcroft Gauge, now in common use. It is not liable to be affected by heat or cold, and is sensitive to the slightest variation of pressure in the boiler.

Our Gauge is now adopted and in use on the following railroads: Little Miami, Indianapolis & Cincinnati, Marietta & Cincinnati, Terre Haute & Alton, Cleveland, Columbus & Cincinnati, Evansville & Crawfordsville, Ohio & Mississippi, Memphis & Charleston, and other roads at the West.

For its character and operation we refer to the Master Mechanics on the above roads.

The importance of the Steam Gauge on every locomotive cannot be over-estimated, both as a means of economy and safety; and it is believed that no railroad will long be without a full supply of these Gauges for its machinery.

J. M. BROWN & CO.,  
250 East Front street, Cincinnati, O.



**Prosser's Patent**  
**LAP-WELDED**  
**IRON BOILER TUBES,**

every article necessary to  
**DRILL THE TUBE-PLATES**  
and to set the tubes in the best manner. Tube Cleaners, Steel-Wire and Whalebone Brushes. Tubes for Artesian wells, Pump Shafts, Line Shafting, conveying Steam or Water, &c., &c., screwed together, flush on both sides, or with couplings either outside or inside; also expanded into Flanges. Free Joint Tubes for Core Bars, Railings, &c., Pall Lever Wrenches and Wrought on Blacksmiths' Tuyeres.

Agents for Krupp's celebrated Cast Steel for Shafts, Railway Axles, Tires, Plater's Rollers, Rifle and Gun Barrels, Cannon, &c.

**THOMAS PROSSER & SON,**  
82 PLATT STREET, New York.

**The Great Arnold Secret Discovered at Last**

**BUTLER'S MERCANTILE**  
**RECORD AND COPYING FLUID INKS.**



Ledgers & Records only. For Books, Letters, &c. For Letter Press only

**MANUFACTORY NO. 39 VINE ST., CINCINNATI.**

I make three distinct varieties, differing one from the other only in their degree of fluidity, and designated by the label. **RECORD**.—For Ledgers and Records only. **MERCANTILE**.—For Books, Letters, and General purposes. **COPYING**.—For Letter-press only. Have had awarded them 14 Diplomas, Silver and Bronze Medals. Refer to 5,000 Merchants and Bankers, who use them, in the South and West. Address Orders to

N. B. No connection with any other Fluid Ink, bearing the same or any other name. Parties wanting my Fluid, must be careful to address Orders to 39 Vine street.

**JAS. J. BUTLER, Agent and Manufacturer.**  
*Transportation Office, Cincinnati, Hamilton & Dayton Railroad.*  
**JAMES J. BUTLER, Agent.**—Dear Sir:—We have been using your Copying Fluid for the past month, and find it to excel any thing of the kind we have ever used. In fact we want nothing better, for the purpose it is intended. Please send us one dozen quart bottles like that you left us for trial. Yours, truly **J. REED, Clerk.**

The Ink is also used in the following Railroad Offices: Cincinnati, Hamilton & Dayton; Dayton Short Line; Little Miami; Ohio and Mississippi; Central Ohio; Baltimore and Ohio; Jackson & Vicksburg; Bellefontaine & Indianapolis; Indianapolis & Cincinnati; Lafayette; Madison; Indiana Central; Terre Haute & Richmond; Illinois Central; Galena & Chicago; Michigan Southern & Northern Indiana; and other Roads centering at Chicago; Greenville and Miami; Mad River & Lake Erie; Lake Shore Railroad, and other Western Roads.

N. B. Purchasers of Inks should bear in mind that there is a saving of 10 to 15 per cent. made in difference of freight when bought in Cincinnati instead of New York, besides a saving of time to receiving them. My prices are lower than Eastern Manufacturers generally.

**J. J. BUTLER.**

**GENERAL**  
**RAILWAY SUPPLY AGENCY.**

**SNOOK & HILL'S PATENT**

**LOCOMOTIVE LAMPS,**

83 Liberty Street, Cor. of Broadway,  
**NEW YORK.**

**JOHN W. KELLY,**  
**MANUFACTURERS' AGENT,**

For the sale of all Materials used in the Equipment and repairs of

**RAILROAD ENGINES & CARS,**

ALSO AGENT FOR THE SALE OF

**HUGHES' ATMOSPHERIC FORGE & TRIP HAMMER,**  
**JUDSON'S GOVERNOR VALVE.**

Orders solicited and promptly filled.



# Railroad Record.

E. D. MANSFIELD, - - - } Editors.  
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....FEBRUARY 18, 1859.

## Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

BY WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

### ADVERTISEMENTS—

One square, single insertion .....	\$1 00
" " per month .....	3 00
" " six months .....	12 00
" " per annum .....	20 00
One column, single insertion .....	4 00
" " per month .....	10 00
" " six months .....	40 00
" " per annum .....	80 00
One page, single insertion .....	10 00
" " per month .....	25 00
" " six months .....	110 00
" " per annum .....	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to  
WRIGHTSON & CO.,  
Publishers and Proprietors,

### OURSELVES.

The present number closes the Fifth Volume of the Railroad Record. It is now five years since the establishment in Cincinnati of this Journal, devoted exclusively to Railroads and Statistics, and despite the prophecies of those who wished us no good, the "RECORD" has been a successful Journal. Believing, as we did, that Railroads must be the great avenues for social and commercial intercourse, must pave the way for the development of the agricultural, mineral and commercial resources of our country, we have honestly advocated their construction, between all the great marts of the country and on all lines, where the business offered presented a fair prospect of remuneration for the Capital invested in them. That we should sometimes have lent our aid to the construction of works which afterwards fell into bad hands is not to be wondered, nor is it any fault of ours. The sequel has invariably justified our predictions of the business and prospects of the roads: and it is very evident that a work which would yield a handsome remuneration on a cost of \$30,000 per mile, must pay much less on a cost of \$60,000 per mile. If stockholders will wilfully elect and retain men, who, through incompetency or any other cause double the cost of their roads, while they cannot by any process of ledger-main, double the revenue, we submit that the fault is entirely their own, and the responsibility must rest upon themselves. It is our duty and sometimes a very unpleasant one, to point out their errors, and this we have frequently done, at the expense of the patronage of the very men whose interests we have sought to protect. We do not, however, pur-

VOL. 5.—No. 52.

pose on this account to discharge our duties one wit the less honestly, or express our convictions less frankly. We believe in the speedy construction of the great lines that the commerce and intercourse of our country demands, under competent and economical management. The great axial lines from north to south, from east to west and corner to corner of the Union are yet unfinished, some of them but just begun. Among these we class the Mackinaw and Pensacola roads, the great line leading from Portland, Boston, and New York, through Cincinnati to New Orleans. The line from Chicago to Cincinnati, and thence to Charleston and Savannah, and last but not least in importance the great line from the great eastern cities through Cincinnati and the growing cities of the west to the Pacific Ocean. These lines are all demanded by the imperative voice of necessity, and must be constructed sooner or later. Our opinion is, the sooner the better. When constructed they will be bonds of iron binding in one the great heart of the nation, and will minister alike to its social and commercial wants.

There are many local roads too of vast importance to sections they will develop. The coal and iron of Ohio, the vast mineral deposits of Kentucky, Tennessee and Virginia, and the rich copper fields of Superior, all depend upon the building of lines of railroad, for that development which shall enrich their owners and make our country prosperous. In short, our railroad system is but just begun. We have now twenty-five thousand miles of railroad completed, and must build within the next ten or twenty years at most, at least twenty-five thousand miles more. Such are our convictions, and we stand ready to advocate their construction under able management. And in doing so we seek the encouragement and patronage of the intelligent of our citizens, who can comprehend the wants of our country and its true interests.

### THE ILLINOIS CENTRAL RAILROAD;—AN EXAMPLE OF RAILROAD LOSSES.

There has not been in the United States a fairer opportunity of realizing the most splendid speculation, than that afforded to the original Stockholders of the Illinois Central Road. For aught we know, they have realized the speculation, by selling out to less informed parties. At any rate they had the opportunity. No such splendid speculation has been offered any other company. In a moment of great generosity, and very likely in ignorance of the true value of the lands, Congress granted the Illinois Railroad Company, about (2,600,000) two million six hundred thousand acres of land—in alternate sections, within five miles of each side of the road. The Company immediately sent an agent to Europe, (Mr. Gilbert we believe,) who performed what was deemed

a very extraordinary operation. He borrowed *seventeen millions of dollars*, on a pledge of a large part of these lands. To make the matter sure, and acceptable—about 350,000 acres of good land were set apart in the hands of Trustees, as a fund for the payment of Interest, which then seemed secure. Subsequently, they sold, what are called *Freeland Bonds*, to the amount of \$3,000,000. With twenty millions of dollars in hand, and the interest provided for, the Illinois Central Railroad commenced operations with *without one dollar from the Stockholders*. The Stock rose to the highest point in market, and the Company seemed to realize the proceeds of a Gold mine, without the labor and expense of getting it out. But, after awhile, an assessment of \$5 00 a share is levied on the Stockholders; and then another, and another. In the last year, or two, the road became quite embarrassed. But, in the meanwhile 700 miles of road were completed, and the Directors *actually declared dividends*, payable in Stock however! In the last commercial crisis, the Illinois Central could no longer go on without calling for help. It was no financial surprise. It was an absolute floundering in the mire of inextricable debt. In such a position, there must be an *exposure*, and the Company has made it firmly and honestly. Their frankness however, lets the world behind the scene of *modern financiering*; and is a most admirable illustration of the different modes of raising the wind. We cannot do the public a better service, than by exhibiting the *financiering* of the Illinois Central Railroad Board. In doing it, we know not, whether any one, or, who is responsible specially for the policy adopted. It is too much, in accordance with the practice of all Railroads, to be greatly censured; and yet is a most striking example of financial folly. It appears, that in about five years, the Company has constructed its Road, 700 miles, but has actually lost above its cost in money, *seven millions of dollars*!

That, we are not mistaken, we will give the figures on their own account.

Bonds issued.....	\$16,655,500
Net Proceeds.....	15,049,454
Loss.....	\$1,606,046
Rate, 10 per cent. Discount.	
Second Issue.....	\$3,000,000
Net Proceeds.....	2,079,576
Loss.....	\$ 920,124
Rate 30 per cent. Discount.	
Optional Scrip.....	\$ 872,000
Loss.....	47,286
Rate 5 1/2 per cent. Discount.	
Total Loss in Discounts.....	\$ 2,573,455
Amount of Interest paid on all accounts....	5,944,851
Deduct Total amount of Net Income of Road	1,742,930
Total Loss of Interest.....	\$ 4,201,921
Loss in Dividends paid out of Borrowed money.....	\$ 636,000
Aggregate Loss, viz.:—	
Loss in Discounts.....	\$1,606,046,000
" on Second Bonds.....	920,124,000
" on Scrip.....	47,286,000
" on Interest.....	4,201,921,000
" on Dividends.....	636,000,000
Loss.....	\$7,411,377,000

Here is a dead loss equal to *thirty per cent. of the actual money used!* The cost of the Road-



as charged is \$30,000,000, but the money paid is only \$23,000,000. The residue has all gone to Bankers and Brokers. On \$21,000 of Funded Debt, the Company realized about \$18,000,000; so that the Company pays its Bondholders 8 per cent for ever. The Company have not only lost nearly three millions in the negotiation of these debts; but, they have incurred the absolute necessity of losing *three millions more!* This they do in the increase of interest during the series of years, in which they must pay it. The Stockholders have already paid \$7,000,000, to make up these losses, and they must pay \$3,000,090 more, in the shape of Convertible Bonds, to fund their floating debt. But, what is the condition of the Company, when all this is done? Is there any prospect, that it can get on without borrowing more? And, where will be the end of it? This will be answered by looking at the earnings of the Road.

Net Earnings of 1857.....	\$ 938,436
Total amount of Interest.....	1,763,000

Deficiency..... \$ 829,564

How long will it be before the Illinois Central makes up a deficiency of *eight hundred thousand dollars per annum*? Years must elapse before this will be the case; and in the meanwhile the interest is running on, and being added to the capital! In answer to this statement, some one may say, that the road has been selling lands continually. This is true; but these sales have not been equal to the dead loss made in the meantime. Again, there is little doubt that the best lands have been sold, and the best prices obtained. The debt is continually increased by the accumulation of interest, while the land resource is decreasing. There can be little doubt that the utmost the lands will do is to keep down the interest and pay the losses which have occurred. The stockholders must, therefore, expect to pay heavy sums, before the road will be free from embarrassment, and even then, what revenue can the stockholders expect?

If this be a gloomy picture of a powerful Railroad Corporation, the reader should recollect, that it is a strictly legitimate inference from the facts presented in this report, and from the policy pursued. Now let us suppose a different policy. The road cost but \$23,000,000. Suppose the stockholders had paid \$10,000,000 (they have paid \$7,000,000), in the beginning, and commenced selling their lands free of debt. In 1860 they would have made the road, owned it, without one dollar of debt and interest, and had a million of acres of land left! The difference between these two policies is as wide as the poles. The one will destroy the property of the Company, and the other would have made it immensely rich.

There is another thing in the case worse than bad policy. What possible right had the Directors to declare a dividend, when the Company never made a dollar? If such dividend was declared, its only effect was to give the stock a fictitious value, and increase the debt. The morals of such an operation need no comment. It is a morality, unhappily, which has received too much illustration and been too prevalent in this country.

#### MINNESOTA.

A bill has been introduced into the Legislature of Minnesota, and favorably reported on by the committee, to loan five millions to the Railroads running through their Territory. In the bill, as amended by the committee, we are informed by the St. Paul's *Advertiser*, that the securities to be exacted of the several companies for the legitimate and faithful application of the loans entrusted to them for building the roads, have been increased and surrounded with new restrictions and guarantees. Only one hundred thousand dollars is to be issued in the first place to the several companies, and satisfactory proof of the expenditure of this sum upon the construction of the roads themselves, must be adduced, before another dollar will be issued by the State. On this proof being furnished, fifty thousand dollars more will be issued, to be applied, under similar restrictions, as the condition of continued aid. These loans are secured by mortgages and bonds of the companies, and if any of the companies fail at any time to pay the semi-annual interest and the principal, when due, the bonds of the defaulting companies are to be sold or their mortgages foreclosed, so as to exonerate the State from any advances from its own treasury.

Minnesota does not propose to risk her credit on the basis of securities which are found to be ample elsewhere. The whole of that magnificent Land Grant whose minimum value is fixed by Government itself at \$15,000,000, is practically pledged to the redemption of the bonds. It is not too much to say that the securities are twice as large as have ever before formed the collateral securities of a State loan.

This policy, judiciously carried out, will stimulate the growth, and develop the resources of Minnesota, more than any thing else, and enable her soon to rank along side of the older States in wealth and power.

#### VIRGINIA.

From the report of the committee, on Internal Improvement, of the Senate of Virginia, we learn that under the present rate of taxation, the revenue of the State will be sufficient to pay the interest on the public debt, and all the ordinary expenses of the government, and leave an annual surplus of over \$600,000, provided the treasury can be relieved of a floating debt of about \$1,200,000, arising out of the emission of treasury notes, a deficiency in the sinking fund, and certain acceptances of the Board of Public Notes, in favor of contractors for work already done. The State holds the following interest in the works of the internal improvement named: In the Covington and Ohio Railroad, \$1,500,000; Virginia Central Railroad, \$2,000,000; Orange and Alexandria Railroad, \$889,500; Norfolk and Petersburg

Railroad \$900,000; Manassas Gap Railroad, \$1,680,000; Alexandria, Loudon and Hampshire Railroad, \$720,000; and Richmond and York River Railroad, \$300,000. Total, \$7,029,500.

These improvements, all of them, require farther aid from the State, and the committee recommends the following appropriations:

To the Covington and Ohio Road, \$800,000; Orange and Alexandria, \$300,000; York River, \$200,000; Norfolk and Petersburg, 250,000; Manassas Gap, 250,000; Alexandria, Loudon and Hampshire, 300,000; Central Railroad, 200,000; Extension of Danville, 200,000. Total, \$2,500,000

#### ARIZONA.

We have been shown a specimen of COTTON grown in the proposed territory of Arizona. In appearance it is of a delicate white color and a beautiful silken texture. The fibre is strong and the staple is two inches in length. It is equal to the best Sea Island Cotton we have ever seen. And when made a marketable article, must be sought after for its good qualities. The agricultural resources of the eastern portion of the territory with the mineral deposits of the western, will make this region now a wilderness, a thriving and prosperous state.

#### CITY PASSENGER RAILROADS.

The following remarks apply to all cities, and are on an important subject. City Railroads may be very convenient things; and if the public are really benefitted by them, there is no serious objection to it. But we hold that two conditions should always be required:

1st. That no monopoly should be granted on any street.

2d. That the city, without impairing the property rights of the parties, should retain the power of taking entire possession.

It should be remembered that streets are narrow, and that it is possible a railroad company should occupy it in such a manner as to be a very serious inconvenience to citizens.

In noticing the first Annual Report of the Fifth and Sixth Streets Passenger Railroad Company, the *United States Railroad and Mining Register* makes the following sensible and timely suggestions to the Legislature: "While on the subject of City Passenger Railroads, we would caution the Legislature against authorizing any one company to occupy more of the principal streets than may be necessary to construct two continuous tracks, by the most appropriate routes, between prescribed termini. Especially should no mammoth City Passenger Company be incorporated with authority to lay down, in the streets, trackway diverging from or near the Exchange to different and wide apart portions of the city; for, if the best of the



local passenger business of the whole community be secured by one organization, an increase of fare to suburban points, may succeed the disappearance of the banished omnibus. Let there be *independent* companies and *competition* to keep down prices. 'No monopoly' are not always cant words. The streets were opened and improved at the public expense, and some of them may be occupied with public advantage, by railroad tracks, for local passenger accommodation. The possession of the most important streets, however, if once allowed to chartered companies, will not be easily regained. Hence the present is the fitting time to stipulate efficient conditions."

## Railroads.

### ASHTABULA AND NEW LISBON RAILROAD.

We have received the annual Report of this Road, which presents the following particulars :

This Road of which the Hon. EBEN WESTON, is President, is intended to connect Ashtabula, on Lake Erie, with New Lisbon in Columbia County. Few roads are better situated for a profitable local business than this. It is 84 miles in length, passing through the great and rich Counties of Ashtabula, Trumbull, Mahoning and Columbiana;—30 miles of it lying on inexhaustible beds of Iron and Coal, and crossing the "Cleveland and Mahoning," and the "Pittsburg, Fort Wayne and Chicago Roads.

The following paragraph on Mineral operations is interesting.

There has recently been erected large and extensive Iron Works at Austintown, upon the line of our Road, by Messrs. Wm. Porter, & Co., who are using a large quantity of coal and iron ore, which we have referred to in a former report. It is now estimated that iron can be made about 20 per cent. cheaper in the valley of the Meander, than in the valley of the Mahoning. These iron works are situated immediately upon the line of our Road, 5 miles south of its junction with the Cleveland & Mahoning Railroad, and 4 miles from the Mahoning River and Canal. It is built in the most thorough manner, with all the modern improvements and appliances for the making of iron. The coal used in this establishment are taken from the "Black Band Vein," favorably noticed by Prof. J. S. Newberry, in his report upon the minerals of the southern portions of your line Railroad, made under the direction of your board in 1857. The coal is taken or wheeled directly from the mine to the furnace, after having been roasted at the mouth of the pit, thus saving in the aggregate a large amount in the transit of these materials. Other ores, the "Kidney," the "Rock," and the "Blue ores," with lime stone, and all the materials necessary for making

Iron, are here found in close proximity, with a proper mixture of Lakes Superior and Champlain ores—which will find their way over your road when put in operation—it is believed that every variety of Iron may be manufactured upon the line of your road. This furnace has been in operation but a short time. Its product is now 10 tons per day, but when run to its full capacity, its yield would be at least 20 tons per day.

The report further says: "It is unnecessary at this time to enlarge upon this subject; suffice it to say, that our road bed will literally rest upon a stratification of minerals the whole distance from the point where it strikes the conglomerate rock, in the southern slope of the valley of the Mahoning, to the town of New Lisbon, a distance of 30 miles, which for richness, extent and variety is not surpassed by any locality West of the Alleghanies, and will, in our opinion, at no distant period form the basis of industrial operations which alone in time will furnish to your Road, an amount of business sufficient to make your investments remunerative. The able and scientific report of Prof. Newberry already referred to has done much to enlighten the public mind on the subject it treats upon. Bituminous Cannel coal, Iron ores of great variety, quick lime, water lime, fire clay and sandstone, furnishing a material for manufacturing Flint Glass, as well as a good building material, are here found in great abundance.

In regard to the financial prospects of the road the report says:

For reasons, not necessary to explain here, the Road was divided in two divisions. The northern commencing at the harbor of Ashtabula, and extending south to its intersection of the Cleveland and Mahoning Railroad at Niles, and the southern, from the last named point, to the town of New Lisbon.

#### NORTHERN DIVISION.

It is estimated that about one half of the grading has been done on the first 36 miles, from the Harbor of Ashtabula to the center of Bristol in detached portions. Owing to causes already stated, but little work has been done upon this part of the road this season.—Your directors procured from Wm. Hale, Esq., Chief Engineer of the Company, in September, last, an estimate of the amount necessary to prepare this part of your road for the Iron, making such additions as past experience might dictate and adding 10 per cent. for contingencies, which amounts to the sum of \$91,000. Deducting from this the present means of the Company, applicable to this purpose, it is found that a delinquency exists. To place the completion of this portion of your road beyond a contingency, it was resolved by a meeting of the Company, at Ashtabula, in September last, to raise additional Stock, to the amount of \$60,000, of which \$20,000 has already been raised in Ashtabula, and an effort

is soon to be made to raise the balance of it on that portion of the line immediately interested. The estimated cost of the Road bed ready to receive the Iron, from the center of Bristol, to an intersection with the Cleveland & Mahoning railroad, at Warren, is \$34,000 of which \$12,000 has already been subscribed, and the right of way pretty generally secured to the north line of the Township of Warren, thus leaving a deficiency upon that part of the road of \$22,000. It is believed that when the people living on this portion of the line—the wealthy and prosperous village of Warren included—are satisfied that the company have the means, and the Road is soon to be built north of them, that they will furnish whatever deficiency there may be for the completion of that part of the road.

#### SOUTHERN DIVISION.

The work upon the Southern Division has been expended between New Lisbon and Canfield, a distance of 20 miles, 8 miles of which has already been graded and bridged; principally in the vicinity of New Lisbon, Washingtonville, Green and Canfield. It is desirable that a commencement be made in the spring to construct that part of the road between the Cleveland & Mahoning Railroad, to the furnace of Messrs. Wm. Porter & Co., and it is believed that the balance of the Stock, sufficient for that purpose, will be subscribed by those interested in its completion. Efforts will also be made to increase our subscriptions along the whole of that portion of our line from Canfield North. In fact the great mineral resources of this locality will ensure the speedy completion of this part of the Road. According to the Estimates recently made by your Assistant Engineer, J. G. Chamberlain Esq., a sufficient amount of Stock has been subscribed between New Lisbon and Canfield, to complete that part of the road ready to lay down the Iron, or nearly so, if it be at all available."

We have no doubt, that with prudence and energy, the Ashtabula Road will be carried through, and we have just as little doubt it will be profitable. It will be made cheap for cash, and will have as good a local traffic as any other road whatever. Prices are favorable to all enterprises which are not embarrassed with debt. Materials are cheaper and in a few months money will be abundant, seeking investment.

A NEW ROUTE FROM CINCINNATI TO CHICAGO.—The Dayton Journal advocates the construction of a road from Union City to Fort Wayne, to connect at the former place with the road from Union through Greenville to Dayton, and over the Hamilton and Dayton Road to Cincinnati. In speaking of the project the Journal says:

The first section from Union to Portland, in Jay Co., Indiana, 20 miles, is nearly all graded.

The second section, from Portland to De-



catur, Adams Co., 27 miles, has the Grubbing nearly completed.

On the third section, from Decatur to Fort Wayne, 19 miles, the right of way has been secured.

Depot grounds have been purchased at Decatur and at Fort Wayne.

The grades upon the whole line are easy, the country being generally level. As for bridging—the Wabash and several small streams are to be spanned.

The region through which the line has been located is as fertile as the Miami Valley. The cost of construction, though the line is six miles longer than the C. H. & D., is estimated will hardly be one half as great as that of the latter, as the grades are lighter and the land cheaper. In ten years with the advantages for settlement and for the transportation of produce offered by a railway, the local business will probably exceed that upon the C. H. & D.—for a much wider scope of fertile country will be tributary to the former than to the other.

#### TEXAS AND HER RAILROADS.

The following extract from the *Galveston News*, will show the disposition of Texas towards her railroads.

**SOUTHERN PACIFIC.**—It may be supposed from the objections we have heretofore urged to the past management of that company, that we would be glad to see that enterprise defeated. But we take this occasion to assert that we believe this great enterprise is second to none that has ever been undertaken in this State. We believe this road by way of El Paso to the Pacific, must be attended with incalculable advantages not only to the South and the whole Union, but especially to Texas. So far from thinking that it can operate injuriously to our own seaports, we believe it would bring a vast amount of trade to our ports that would otherwise never reach them. Long before that road can be completed, one or more of the roads now in progress from Houston and points on this and other bays on our coast, will, in our opinion, be made to tap it, and the result would certainly be that all the heavier articles of freight destined for Northern or European ports, and that could not so well bear the heavy expense of land transportation, would go to the nearest ports for shipment, or the ports of our own State. We therefore say that every consideration of interest compels us to desire the most speedy prosecution of the Southern Pacific Railroad to its final completion. But we have looked upon the past management of the company as seriously objectionable in many respects, and as calculated to defeat rather than to expedite the completion of the road; and it is for this reason that we have taken so much pains to state our objections as clearly and fully as possible. It is gratifying to us to be able to state that a gentleman, who has long been intimately connected with this great enterprise, has frankly admitted to us that some of our objections to its management were well grounded, that he should use his exertions to prevent mismanagement in future, that he believed measures had already been taken that would prevent any just cause of complaint in the future, and that he would take the earliest opportunity to state all the facts fully in connection with the past management and the present condition and prospects of this enterprise, and he expressed the opinion that he would be able to remove all

reasonable grounds, of objection at the present time. We hope soon to meet with this full and frank exposition of the past and present condition of the company, and shall give it to our readers promptly; and we trust we shall be able to see better guarantees than we have heretofore, for the faithful management and speedy prosecution of this road.

**TEXAS CENTRAL RAILROAD.**—THE GOVERNOR'S VETO.—We published on Thursday the Message of Governor Runnels, vetoing the bill "to amend the charter and for the relief of the Houston and Texas Central Railroad," and stated that, as we had not seen the bill itself, we could not form an opinion of its merits or the justice of the veto. A gentleman who has just arrived here from Austin, and who has had the most excellent opportunities to learn the real facts in the case, informs us that the bill was passed in such a shape that it was impossible for the Governor to approve it, because of constitutional objections. The first of these was that the bill contained *three specific and distinct objects*, while the Constitution expressly forbids more than one in each bill, and that one must be clearly expressed in the title. This would have rendered the bill void and of no effect, even though the Governor had affixed his signature. The provisions of the bill were:

1st. To extend the road into the Indian Territory, beyond the limits and jurisdiction of the State.

2d. To remit the penalty of forfeiture by cancelling a bond of \$10,000 executed by the R. R. Company to the State.

3d. To extend the time for completion of the third section of the road, eighteen months beyond the present requirements of the charter.

To the first of these the Governor objects as going beyond the bailiwick of the Legislature, which clearly has no authority in the Indian Territory.

To the second provision the Governor replies that the remission of a penalty belongs to the Executive, the Constitution providing that he may exercise that function under such regulations as the Legislature may enact. These regulations have never been provided, but the Governor, we learn, expresses his willingness to remit the penalties to all railroad companies which have incurred them through *inability*, rather than *neglect*, to comply with their charters, and he desires the Legislature to lay down the rules by which this authority shall be exercised. In the case of the Central Railroad, he makes no objection to the remission of the penalty when the matter is presented to him in the legal and constitutional form.

To the third provision of the bill the Governor will give his assent when an act having that object, and nothing else, in view, shall have been passed and presented to him. He believes that the Houston and Texas Central Railroad has contended against many and great difficulties, and he will not willingly throw any obstacles in the way of its success. His only object in vetoing the bill that was passed, was to keep the Executive and Legislative department of the State Government within the limits of the Constitution, and make whatever relief was extended to the Central Railroad *both legal and effectual*.

We have never believed the charge made against Gov. Runnels, that he is an enemy to internal improvements or opposed to their liberal encouragement by the State, and we think the expressions contained in his first Message to the Legislature, and his more re-

cent action in regard to the Central Railroad, should confirm the hope and confidence reposed in him by the people, that he will favor every project which promises to advance the prosperity of the State, while at the same time administering the strict letter of the Constitution and laws he has sworn to uphold.

#### ANNUAL MEETING OF THE STOCKHOLDERS OF THE SUNBURY AND ERIE R. R.

The annual meeting of the stockholders of the Sunbury and Erie Railroad was held yesterday, at the office of the Company, in Walnut Street.

Mr. Charles Gibbons was called to the chair, and Philip M. Price acted as secretary.

The minutes of the last meeting were read and approved.

The Annual Report was then read by the secretary. It is as follows:

##### REPORT.

*To the Stockholders of the Sunbury and Erie Railroad Company:*

The Board of Managers, in again presenting their annual report, express their regret that more has not been accomplished during the last year, toward the completion of the important work under their charge.

They have, however, done all that the limited resources at their command could effect.

On the Eastern Division, the deep cut opposite Jersey Shore has been completed, leaving no heavy work unfinished between Williamsport and Farrandsville, so that this important section could be put in running condition in six months' time, whenever the means for the purpose can be secured.

On the Western Division the work has been pushed with considerable activity during the whole season, principally from resources furnished in that region. Here also the heavy work is so far advanced, that in six or eight months' time the line could be put in full operation from Erie to Warren, and soon after into the Western margin of the coal fields of Elk and McKean counties.

As the Company had no means of pushing forward the Eastern and Middle divisions of the road, and it was felt that the large contracts existing for these portions of the line might embarrass their future operations, the Board, during the last Summer, made arrangements with the contractors on terms mutually satisfactory, to relinquish and annul their contracts.

As, since that period, the prices of labor and materials of all kinds have greatly fallen, the Company must profit largely in re-letting the work, if they can be put in a position to pay in cash at the present low rates, for whatever work and materials they may require.

The Board have also secured engagements from the contractors of the Western Division, to relinquish their contracts, if at any time it shall be considered for the interests of the Company to have them cancelled.

They have also determined upon extensive revisions of the surveyed line of the route, with a view of avoiding a large amount of the heaviest work, which, from the best information furnished, it is believed can be accomplished with but a light increase of the maximum grades heretofore adopted, and still leaving them far below the highest grades



adopted on all the other great lines from the seaboard to the west.

From the lower rates at which contracts can now be made, and the saving thus to be effected by a revision of the line, it is believed that the whole may be accomplished at very much less cost, and in much less time, than has been heretofore estimated, if some comprehensive financial measure can be accomplished, sufficient to ensure the funds necessary to complete the whole work.

In the year 1855 a mortgage for six millions of dollars was executed upon the whole line of the road, finished and unfinished, to secure a like amount of bonds to be issued under the same. These bonds it was found difficult to negotiate upon favorable terms, in consequence of the character of the security furnished. The Board, therefore, determined to retire the few bonds issued to contractors, and had the mortgage duly satisfied, and in September last created a new one for one million of dollars upon the finished portion of the road from Sunbury to Williamsport, which is the only outstanding mortgage of the Company. Of the bonds secured by this mortgage, \$529,000 have been issued, leaving in the hands of the treasurer \$471,000 thereof.

The financial condition of the Company up to the first of January last, is shown by the following abstract of the Treasurer's accounts:

#### RECEIPTS.

From installment on subscriptions paid in by the city of Philadelphia .....	\$2,000,000 00
By the District of Richmond .....	250,000 00
By other Stockholders .....	1,574,189 69
<b>Total capital stock paid in .....</b>	<b>\$3,824,189 69</b>
From Bonds of the Company issued .....	539,000 00
" temporary loans .....	270,227 95
" bal. of old assets of Company .....	1,738 78
<b>Total receipts .....</b>	<b>\$4,625,156 42</b>

#### EXPENDITURES.

For Building, Land, and Right of Way .....	\$ 159,281 80
For engineering of the whole route .....	174,277 21
For Road Construction and superstructure from Sunbury to Williamsport—finished .....	\$1,957,306 72
For do. between Williamsport and mouth of Susquehanna .....	909,711 81
For do. from Erie eastward .....	174,057 20
For Piers at Erie harbor .....	78,890 37
<b>Total expended in construction .....</b>	<b>3,119,966 10</b>
For incidental expenses .....	115,927 46
<b>Total expended on the work .....</b>	<b>\$3,609,452 57</b>
For Equipment of Road .....	84,040 99
In hands of disbursing agents and balances of unsettled accounts .....	27,333 69
Discount on Municipal and H. R. Bonds .....	249,622 51
Interest on temporary and permanent loans .....	\$164,995 93
Interest paid Stockholders .....	339,900 59
<b>Total interest .....</b>	<b>\$504,896 52</b>
From which deduct,	
Receipts from Road .....	\$144,682 62
Less maintenance of Way, etc .....	36,608 24
	<b>\$108,074 38</b>
<b>Balance of interest account .....</b>	<b>396,822 14</b>
<b>Total expenditures .....</b>	<b>\$4,368,271 90</b>
Amount in hands of Treasurer:	
Bills receivable and items due Company .....	\$ 17,396 55
Corporation Bonds .....	235,000 00
Telegraph Stock .....	2,000 00
Cash .....	2,597 97
	<b>256,884 52</b>
<b>Total .....</b>	<b>\$4,625,156 42</b>

The earnings of the finished portion of the road have not been as great as were anticipated at the time of the last annual report. For the first eight months they fully realized our calculations, but just as the coal business was becoming fairly developed, and the road was fully stocked for the purpose of carrying

it on to advantage, the financial crash that overspread the country prostrated many of the operators, and for the last four months of the year the receipts from this source was almost cut off. The same causes also operated, unfavorably upon the passenger and miscellaneous business of the road.

Arrangements have now been made for a resumption of the coal business with every prospect of success, and with the general revival of trade our earnings must continue steadily to increase.

The Northern Central Road, so long delayed has now been completed to Trevorton, ten miles from Sunbury, and in the course of the ensuing Spring will be extended to the latter point, and connect with our road there.

The completion of this link, giving a direct communication by way of Harrisburg and the Pennsylvania Railroad, with the city of Philadelphia, and by the Northern Central with Baltimore, must add largely to the traffic and travel over our road.

Under all the disadvantages of the past season, the net income of the finished portion of the road has exceeded the interest of the mortgage debt upon it, and under no circumstances can this interest fail to be promptly met, thus constituting the bonds of this Company as secure and reliable an investment of capital as is afforded by those of any other. The bonds yet to be disposed of will be sufficient to provide for all the floating debt of the Company, and leave a considerable balance applicable to the further prosecution of the unfinished work, whenever a sufficient additional amount shall be raised to enable the Board to complete any important section of the Road. Until such additional means can be received, the Board feel that it would be unwise to attempt to finish any such section, as the recent experience of most companies has convinced their managers of the extreme impolicy of incurring heavy floating debts.

Although the resources of the finished portion of the work can be but very imperfectly developed, till the road is pushed much further toward completion, and considerably over a million of dollars has been expended on unfinished work, now wholly unproductive, the Board is convinced that it would be much wiser to wait until the public become more thoroughly alive to the importance to the interest of our State and City, of the completion of this great enterprise, than to attempt with inadequate means to push forward any large portion of the line. Such an attempt could scarcely result otherwise than to involve the Company in pecuniary difficulties, from which it is now virtually free.

In conclusion the Board will briefly call attention to the vast and rapidly increasing trade of the Great Lakes, for which our road, when completed, will afford the shortest, cheapest, and most favorably located outlet to the Seaboard:

In 1846 the whole commerce of these Lakes, according to the report of Col. Albert, of the U. S. Topographical Engineers, amounted to .....	\$63,164,910
And he predicted with great confidence, an annual increase on this amount of 17 per cent., amounting, according to his estimate, in ten years, that is, in 1857, to over .....	170,000,000
The actual result, according to official tables, was in 1848, two years thereafter .....	\$186,484,905
And in 1851, as stated in Andrews' Report, published by order of Congress .....	326,593,335
There is no reason to believe that this astonishing rate of increase has diminished since. A progressive increase of only 10 per cent. per annum upon the latter amount would swell the aggregate for 1857, to .....	\$580,000,000

an amount probably far below the figures actually reached.

It must rest with the authorities and citizens of Pennsylvania and Philadelphia, to say whether this ever swelling tide of commerce and wealth must continue to shun us, as if our very soil was unfriendly to its genial progress, and flow to enrich our more enterprising neighbors; whether one-fourth of the surface of our good old Commonwealth, teeming with the natural riches of the forest, the soil and the mine, shall remain in its primitive wilderness condition; or whether, by an enlightened and vigorous effort, what may be truly called Pennsylvania's great highway, shall be promptly completed, and thus pour through the whole length of the State, and into the lap of her Metropolis a full stream of that rich trade that is ever floating over those inland seas, and at the same time fill our now neglected North-western counties with a busy, prosperous and happy population.

Submitted by order of the Board.

WM. G. MOORHEAD, *President.*

PHILIP M. PRICE, *Secretary.*

#### MANAGERS.

Wm. G. Moorhead, S. V. Merrick, Ellis Lewis, John C. Cresson, A. Boyd Cummings, Henry Duhring, Philip M. Price, C. B. Wright, D. K. Jackman, Alonzo Wilcox.

Previously elected by City Councils:

James D. Whetham, Thomas L. Kane, and Harry Connelly.

#### THROUGH TO LAKE MICHIGAN—DETROIT & MILWAUKEE R. R.

We understand that the long pending negotiations of this Company for the means to complete this line to Lake Michigan, and thus open to our beautiful city, a new and shorter route to the great Northwest, which centres at Milwaukee, were completed yesterday. The Board of Directors were recognized in accordance with the terms of the negotiation, and now consist of the following gentlemen, viz:

Robert Gill, Esq., London, England; William Govan, Esq., Glasgow, Scotland; Charles J. Bridges, Esq., Thomas Reynolds, Esq., Hamilton C. W.; John Young, Esq., Henry C. R. Beecher, Esq., London, C. W.; Henry N. Walker, Esq., N. P. Steward, Esq., E. A. Brush, Esq., Detroit.

At a Subsequent meeting of the Board, Charles J. Bridges, Esq., was elected President, Thomas Reynolds, Vice President, and C. C. Townbridge, Esq., Secretary.

We are informed that the Work on the line will be speedily resumed, and it is expected that the road will be opened to Grand Rapids by the first of April, and to Lake Michigan early in the summer. We cannot but congratulate the people living along the line of this important thoroughfare, upon the certain completion of this road. Too much praise cannot be awarded to the late Board, who have, for four years, pushed forward this work against all obstacles.

The building of this Railway has added many millions to this State. It is by far the most important, opening as it does the fertile valleys of the Shiawassee, Maple, Lookingglass and Grand Rivers. In due time, under the management of the present Board, we hope to see such encouragement given to various works contemplated for opening the northern portion of our State as to secure to Michigan the best system of railways of any State in the Union.



It will be seen that a majority of the present Board are the gentlemen who have so ably and successfully managed the Great Western Railway of Canada—a road which is now and always has been a favorite with the citizens of Detroit and Michigan.—*Detroit Tribune January 23.*

Our citizens will share in the gratification expressed by the *Tribune* at the prospect of the speedy completion of the Detroit and Milwaukee Railway. There seems to be no doubt that it will be finished to Lake Michigan and opened for business, within the next five, or six months. High as are the anticipations of our citizens, as to the favorable influence of this new thoroughfare upon the fortunes of Milwaukee, we believe that the reality will far surpass them.

#### MARIETTA AND CINCINNATI.

The following is the financial scheme of this Company, as adopted by the committee of nineteen persons appointed by the meeting of stock and bond holders at Chillicothe, on Feb. 10. We think our readers will conclude with us that it is a remarkable document.

#### FINANCIAL SCHEME.

1. That creditors holding Third Mortgage Bonds as Collateral, shall surrender the bonds they hold for twenty per cent. of the amount of the bond in cash, which is to be credited on their respective claims, and in payment of the balance, they are to receive Third Mortgage Bonds at par.

2. That the holders of the Floating Debt shall have the privilege of taking Third Mortgage Bonds at par, to be paid one-fourth in cash, and three-fourths in the liabilities of the Company; the Coupons or interest of the Domestic Bonds past due, shall be considered a part of the Floating Debt. And after forty-five days' notice of this proposition, the Directors shall be at liberty to make such disposition of the unsold Third Mortgage Bonds as they shall deem best. Parties holding Income Bonds as collateral to their claims, shall surrender such Bonds and the Coupons attached thereto.

3. The stockholders shall surrender one-half of the stock held by them to the Directors, to be disposed of by them as they may find expedient, for inducing relief or assistance to the Company.

4. That the holders of the Special Bonds, secured by First Mortgage Bonds of the Marietta and Cincinnati Railroad Company at 80 cents, shall take the First Mortgage Bonds in payment in full.

5. That those who have loaned to the Company their individual notes, and hold First Mortgage Bonds as security, shall take them in payment at 80 per cent.; and those who have loaned to the Company their individual notes, and hold Third Mortgage Bonds as security, shall take half their pay in cash and half in Third Mortgage Bonds at par.

6. That the holders of the First Mortgage Bonds of the Marietta and Cincinnati and the Hillsboro' and Cincinnati Railroad Companies, shall fund the Coupons and the interests thereon up to, and including July 1, 1859. After which the said Coupons and the interest thereon shall be considered a part of the principal of said mortgage debts, payable at the same time, and entitled to interest at the same rate, payable annually. Interest Scrip, representing the Coupons thus funded, shall be issued, and the Coupons placed in the hands of a Trustee in New York city, to be held by him as security for the final redemption of such interest Scrip.

7. The holders of the Second Mortgage Bonds of the Marietta and Cincinnati Railroad Company shall fund the Coupons and interest there-

on from November 1, 1857, to May 1, 1860, both inclusive; after which the said Coupons and the interest thereon shall be considered a part of the principal of said Second Mortgage, payable at the same time, and entitled to interest at the same rate, payable annually. Interest Scrip, representing the Coupons thus funded, shall be issued, and the Coupons placed in the hands of a Trustee in New York city, to be held by him as security for the final redemption of such interest Scrip. Said First and second Mortgage Bondholders shall take the remainder\* of the Third Mortgage Bonds, paying therefor seventy-five cents on the dollar in cash.

8. As the adoption of the plan herewith submitted, results largely to the benefit of the holders of Domestic, Income and Sterling Bonds who are not asked to contribute anything further, the holders of all such bonds shall surrender the interest Coupons thereon, to become due up to and including the year 1862; and that the holders of Domestic Bonds, maturing in 1859, shall surrender such Bonds, and take in lieu thereof Bonds of 1862 without interest.

9. An Independent Rail Road Corporation shall be organized under the laws of Ohio, for the construction of the Road from Scott's Landing to Belpre; that said Company shall issue Bonds, redeemable in ten years, for which a sinking fund is to be provided from the receipts of the Company, under a contract between said Branch Company and the Marietta & Cincinnati Company.

The Board has no hesitation in recommending this plan of connection with the North Western Rail Road on the river bank, for several reasons.

1. That it can be built in from three to four months time; while any of the other proposed routes will require from eighteen months to two years.

2. The cost of this branch on the river bank, including right of way, stations, and other necessary accommodations, will not exceed one-fourth the sum required for the construction of either of the other proposed lines.

The difference in the time of construction is decisive as to the true policy of the Company. The delay required for the construction of any other than the river line to connect with the North Western Road, would be fatal to this Company.

10. Aid from Baltimore, to the extent of Three Hundred Thousand Dollars, to be applied for in pursuance of the resolution of the meeting of the 10th of February, 1858.

11. Corporations holding Stock upon which the Company has agreed to pay cash interest, shall surrender all claims for interest past due, and to become due, until the year 1862.

12. Any of the holders of the floating debt who may be unable or unwilling to accede to the arrangement in the second proposition, shall give the Company the option of paying off their claims at twenty-five cents on the dollar, in cash, at any time within the year.

\* About three hundred thousand dollars, if this proposed scheme is adopted.

#### The Committee was composed as follows:

For 1st Mort. Bonds, Elihu Day, of Newark, N. J.  
 " 2d " " T. W. Powell, of London, England.  
 " 3d " " Henry Massie, of Chillicothe, O.  
 " Domestic " Wm. Welsh, of Chillicothe, O.  
 " Stockholders. John Wisheart, Frankfort, O.  
 " Floating Debt. T. D. Lincoln, Cincinnati, O.

#### DIRECTORS.

NOAH L. WILSON,.....Chillicothe, O.  
 JOHN MADEIRA,.....do.  
 M. SCOTT COOK,.....do.  
 WILLIAM S. NYE,.....do.  
 JOHN MILLS,.....Marietta, O.  
 BEMAN GATES,.....do.  
 DOUGLAS PUTNAM,.....Harmar, O.  
 WILLIAM P. CUTLER,.....Constitution, O.  
 A. B. WALKER,.....Athens, O.  
 HUGH SMART,.....Greenfield, O.  
 ALPHONSO TAFT,.....Cincinnati, O.  
 JONATHAN S. NILES,.....do.  
 SAMUEL B. KEYS,.....do.

#### ASSESSED VALUATION OF PROPERTY IN IOWA.

The following comparison of the taxable property of the State, for the last seven years, is given as an indication of the progress it is making in wealth:

In 1851 it was.....	\$ 22,464,550
1852 " .....	27,427,476
1853 " .....	49,540,304
1854 " .....	72,227,205
1855 " .....	106,495,390
1856 " .....	164,394,413
1857 " .....	210,044,533

This comparison is highly gratifying, and will justify the State in making such appropriations as are needed for the erection of asylums and other public buildings, the encouragement of institutions of learning, and the advancement of all her enterprises, without the fear of financial embarrassments.

The aggregate valuation of the counties for 1857, is \$210,044,533 54; and the State tax is \$420,089 06. Dubuque county, exclusive of town lots, is valued at \$15,453,156, and taxed \$32,906 31. Lee county is valued at \$12,132,788, and taxed \$24,265 58. Scott county is valued at \$3,685,813, and taxed \$17,371 63. Muscatine county is valued at \$7,659,640, and taxed \$15,319 79. Des Moines county valued at \$7,597,738, taxed \$15,195 48. The average valuation of land per acre in Dubuque county is \$18 96. Scott \$13 14, Muscatine \$16, Des Moines \$12 07. Lee county is not returned. The aggregate value of town lots in the State is \$29,443,883; personal property, \$45,439,564 66. Dubuque county again leads off with \$5,144,595 in town lots, and has \$4,113,360 in personal property. The personal property of Lee county is \$2,712,208; its town lots are not given. Scott county follows with \$2,922,278 in town lots, and \$2,091,688 in personal property. Des Moines \$2,464,375 in town lots, \$1,744,950 in personal property; and Muscatine \$1,814,690 in town lots, and \$1,590,718 in personal property. In the statement showing the indebtedness of the different counties to the State, Dubuque county is the only one "balanced." Des Moines owes \$3,568, Lee \$5,054 60. Muscatine \$732,59, and Scott \$1,169 36.

#### MONETARY AND COMMERCIAL.

The past week, although not marked with any very strong features, has been characterized by decided improvement. The curtailing of business and cessation of speculation consequent upon the panic, and the extinguishment of debts without the creation of new ones, is having a favorable effect upon the discount markets. Capital is not sought after with the avidity that it was two months ago, and holders find it difficult to realize the high rates obtained since last September. We quote rates in the regular houses at 10 and 12 per cent., outside for gilt edged paper from 15 to 24 per cent.; other grade, 18 to 26 per cent. per annum. Names are still scrutinized very closely, but not with the timidity that was observed till recently.

Eastern Exchange has remained at  $\frac{1}{4}$  to 1 per cent. premium. New Orleans at  $\frac{1}{4}$  to  $\frac{1}{2}$  premium.

Business in general is more active, and there is a prospect of a moderate specie trade. We regret to notice some failures during the week. They are, however, parties who received extensions in the fall, and were unable to meet their paper a second time due. The probability is, that the extension was too short.

Matters at the East are beginning to resume their wonted course. Money is abundant on private securities, State stocks and real estate, and can be had at low rates. There is none, however, for securities that are in the least doubted. Some changes have been proposed.



ed in the Banking laws of New York, in which a Committee of the New York Chamber of Commerce have reported:

The conclusions that the Committee have come to, are briefly as follow: That our banking system needs no extensive alteration; and in fact it might have been pointedly added by the Committee, that we have had already too much legislation on the subject. Again, that the simple plan of the Banks holding sufficient gold, will accomplish all the sound and practical benefit which the proposed changes require. In this the Committee have rightly probed the root of the evil. The recent experience of the New Orleans Banks, that are obliged to keep thirty-three per cent. of their means in specie, proves, that with such a reserve, no fears of a suspension need ever be apprehended. The Committee also rightly recommend it to be desirable, that the Banks be generally left to the management of their own private affairs. The pledging of land mortgages for currency security is condemned, and in this the recent sales of land mortgages for redemption of hills, bear them out. Altogether, a better digested report and conclusive answer to our finance doctors, has not yet appeared as the result of our Bank suspensions.

The New York Courier says:

The business of the Stock Board shows no diminution, but it is evident that the strength of the rise has been spent. The violent fluctuations in the Stock Market are favorable only to the knowing ones, except in the rare cases where outsiders are wise enough to sell at high prices and buy at low. The Chronicles of the Stock Exchange show this to be the exception, not the rule with bona fide investors.

#### SALES AT THE NEW YORK STOCK BOARD—Feb. 13.

\$10,000 Ohio State 6's, '60.....	101
\$2,000 Tenn. State 6's, '60.....	88½
2,000 Virginia 6's.....	92
2,000 North Carolina State 6's.....	94
50,000 Miss. 6's.....	83½
1,000 Cal. 7's, '70.....	79½
2,000 Erie Bonds '75.....	75
1,000 Michigan C. 8 p. c.....	98½
7,000 Illinois Central R. R. Bonds.....	95
1,000 Miss. 6's.....	84½
50 Shares Erie R. R.....	28½
100 " Hud. River R. R.....	22
20 " Harlem R. R. stock.....	14
100 " Reading.....	56½
100 " Mich. Cent.....	65
100 " Mich. S. & N. Ind.....	22½
75 " Panama.....	100½
50 " Galena & Chicago.....	86½
100 " Cleveland & Toledo.....	43½
7 " Chicago & Rock Island.....	75

#### OLD STAND.

### Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

**Locomotive & Hand Lanterns,**  
**ENAMELLED HEADLININGS,**

Brass and Silver Trimmings,  
**COTTON DUCK FOR CAR COVERS,**  
**Portable Forges and Jack Screws.**

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES,  
Of the late firm of Bridges & Bro.  
JOEL C. LANE.

feb4tf

### IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,  
Manufacturers of

**LAP-WELDED BOILER FLUES,**  
1½ to 7 inches outside diameter, cut to definite length as required.

**WROUGHT IRON WELDED TUBES.**  
From ½ to 3 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

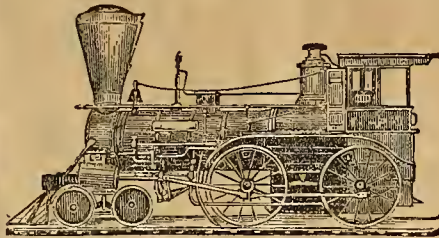
**Warehouse, 85 South Third St.,**  
PHILADELPHIA.

### RAILROAD IRON. LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '66-2m.] J. H. GOODMAN & CO.,  
no. 7 Wall st., N.

## CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

## MACKINAW CITY.

"If one were to point out on the map of North America, a site for a great central city in the lake region, it would be in the immediate vicinity of the Straits of Mackinaw. A city so located would have the control of the mineral trade, the fisheries, the furs, and the lumber of the entire north. It might become the metropolis of a great commercial empire. It would be the Venice of the lakes."—*Ferris' States and Territories of the Great West*, page 183.

"As the center of one of the richest mining regions in the world, as the northern terminus of one of the longest lines of railroad in our country, and the practical western termination of the great system of Canadian railroads now aiming at this crossing ground, as the natural harbor for a lake region whose commerce is already greatly increasing, Mackinaw possesses elements of growth and prosperity which can not fail to give it importance—an importance probably not behind the fifth lake city in the next twenty years."—*Railroad Record*.

"We have shown Mackinaw in geographical position to be equal to any point in the interior of America, and scarcely inferior to such points as Singapore, or Constantinople. \* \* \* That the site of the town is remarkably good,—that it is healthy. \* \* \* That it has more than the advantages of Cincinnati for manufactures. \* \* \* That in the most important points of comparison, its position is superior to that of Chicago, a city which is the growth of only twenty years;—and finally, that by the grants of the Government already made, here will center a system of Railroads, unrivalled in their magnitude and importance. \* \* \*

"On this site, so favored by so many concurring advantages, Mackinaw City has been laid, with broad streets, parks of native forest trees, and public grounds adapted to the wants and convenience of what we may reasonably anticipate, as a future city of rapid growth, of numerous population, of industrial arts, of extensive commerce,—presiding over those magnificent lakes—as the QUEEN OF THE NORTH."—*Edward D. Mansfield*.

The undersigned, Trustees for the Proprietors of the Lands of, and adjacent to "MACKINAW CITY," have the pleasure of presenting, for the consideration of capitalists, business men, and others, what they will concede to be, upon investigation, the most reliable point for investment and settlement, now available in the west or north.

Mackinaw evidently occupies the most commanding natural position for a city of the first class; surrounded as it is, by a widely extended territory, abounding in elements of the greatest wealth, affording the utmost encouragement to the manufacturer and mechanic in their widest diversity of employment, and without the possibility of a competing city in any direction nearer than Detroit on the south.

They feel, from what has been so truly said by E. D. Mansfield, Esq., a gentleman well and favorably known for his ability and habits of close investigation and comparison, that nothing more is left to be said, but to set forth the policy which they have adopted, and design to carry out, the more efficiently to promote the interests of this location, and at the same time to aid in the development of the vast resources of the surrounding region.

From the map it will be seen that streets are laid out eighty feet in width, and the avenues one hundred and one hundred fifty feet, respectively. In the deed of dedication of these to the public, provision is made for side walks, fifteen feet in width on each side, to be, for ever unobstructed by improvements of any kind, shade trees excepted, thus securing a spacious promenade, worthy of a place destined to become a principal resort for pleasure and health. Provision is also made for the proper use of the streets and avenues by Railroad Companies, adequate to the demands of the business of the city.

The lots, with the exception of those in fractional blocks, are fifty by one hundred and fifty feet, thus affording ample room for permanent, convenient, and ornamental improvements.

The Park now laid off, embraces the grounds of the Old "Fort Michilimackinac," sacred in the history of the country. These grounds, now in their natural condition, are unequalled for beauty of surface, location,

scenery, soil, trees, etc., by any Park in any city in this country; and when the skillful hand of the horticulturalist has marked its outline and threaded it with avenues and foot paths, pruned its trees and carpeted its surface with green, it will present the very perfection of all that constitutes a Park delightful. The character of the soil,—it being a sandy loam, with sand and gravel underlying it,—renders it capable of the easiest and most economical improvement, securing walks always dry, hard and smooth.

This Park, with suitable blocks and lots for county and city buildings, market houses, schools, etc., will be duly appropriated to these uses, whenever the proper authorities are prepared to select suitable sites; and lots for churches and institutions of learning and charity will be freely donated to parties contemplating early improvement. Thus the Trustees propose to anticipate, by avoiding the errors of older cities, the wants of Mackinaw City in perpetuity, and free forever its citizens from taxation for any grounds required for the public good. They also design to place it in the power of the General Government to secure, by like donation, at an early day, the grounds necessary for such Fortifications as the wants of the country and commerce may require, on the simple condition of speedy improvement. This liberal policy, it is believed, will best promote the true interests of the city and country, and at the same time be productive of the greatest pecuniary profit, both to the original proprietors, and to all others who may make investments at this point.

It is also within the purposes of the Trustees, to expend a large portion of their income from sales, in providing for the public wants, by the erection of Docks at the most important places, and by the establishment of Ferries, in view of which they have secured the land on the opposite side of the Straits. And they will also, as their means will justify, make loans to aid parties in the establishment of manufactures, etc.

Building materials of great variety and in abundance are at hand. Lumber can be had for mere cost of preparation, and the soil at no very distant point, is suitable for making bricks; while for immediate use, Milwaukee can furnish the articles of the best kind in any quantity. The shores of Lake Superior abound with exhaustless quantities of Granite, Sand Stone, and Marble; and Lime Stone and Sand are on the spot.

There are three harbors, the most eastern of which, is well known to navigators, as affording perfectly safe anchorage at all times; and when suitable docks are built, they will offer unusual advantages to commerce.

The surface of the city itself is unrivalled, having a natural grade suited to city wants, and the soil being a sandy loam with sand and gravel underlying it, will form the cheapest and best foundation for streets and avenues.

Evergreen and other trees of full growth now cover the grounds, affording a healthful and delightful shade, and capable of varied embellishment, without the delay incident to artificial growth. The grounds adjacent to the city are of the same character, gradually ascending until an elevation of seventy-five or a hundred feet is attained, affording the finest views of the Lakes and neighboring islands.

The following are the terms on which the Trustees propose to sell the property which they have subdivided into lots, as represented in the subdivided plat of the city. Notwithstanding the superior facilities of this point over hundreds of others in the west where lots have been readily disposed of at ten, twenty, thirty, and even fifty dollars per foot, the Trustees in order to give impetus to the growth of Mackinaw City, and to afford a margin for others to profit by, propose to all settlers who will immediately improve the property by the erection of mills, hotels, dwellings, manufacturing and printing establishments, docks, etc., etc., to donate the lots necessary for such purposes, subject to the choice of the parties themselves; and to those who desire to profit by the inevitable advance of property contiguous to their own improvements, the Trustees will sell lots on long time, if desired, at the unprecedented low price of five dollars per foot, front.

Capitalists and non-residents, desiring to avail themselves of the advantages of such a developing policy, and to invest upon a real estate basis, promising a rapid appreciation in value, can possess themselves for a very limited time, of lots, at the same low price of five dollars per foot.

The title to the property is unquestionable, having within five years, been derived directly from the United States Government, as will be seen by reference to a Title pamphlet issued by the undersigned for the information of parties interested.

Applications by letter will receive prompt attention. Asking a careful perusal of the annexed report on the subject, from the pen of E. D. Mansfield, Esq., (a copy of which will be sent to any party asking for it,) we submit the matter to the public investigation.

EDGAR CONCLING, } Trustees  
A. M. SEARLES, }

CINCINNATI, Oct. 1857.

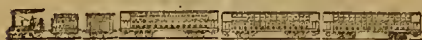
\* Mackinaw Island being seven miles distant from the channel between the narrow points—is entirely unsuited to the purposes of fortification. The military position which commands the Straits, is necessarily that which is at the narrowest point, and that principle is adopted on the Delaware, Chesapeake and other Bays.

† To enterprising business men, Manufacturers, Merchants, etc., who are unsettled by the present general financial revulsion and who think of finding a new home, suited to their enterprise and business, "MACKINAW CITY" with its natural advantages, and the easy terms now presented of acquiring property, probably offers greater inducements than any point either west or north.



**INDIANAPOLIS,**

**Terre Haute, Lafayette, Chicago,  
AND THE NORTH-WEST.**



**INDIANAPOLIS AND CINCINNATI  
SHORT LINE RAILROAD**

**VIA LAWRENCEBURGH.**

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

**THREE PASSENGER TRAINS!**

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

**FIRST TRAIN, 6.20 A. M.**

**CHICAGO EXPRESS.**—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

**SECOND TRAIN, 3.00 P. M.**

**ACCOMMODATION.**—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

**THIRD TRAIN, 5.50 P. M.**

**NIGHT EXPRESS.**—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette, and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galveston, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Duane, Racine, Decatur, Bloomington, La Salle, and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

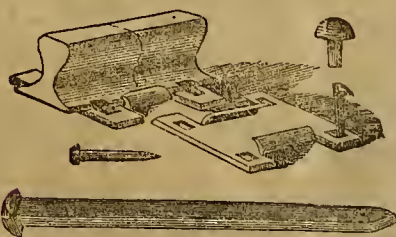
Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

**VIA LAWRENCEBURG.**

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M. **H. C. LORD, President.**

**W. R. L. NOBLE, Gen'l Ticket Agent.**

**GREAT WESTERN****Railroad Chair and Spike Works**

WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of **Wrought Chairs, Hook and Flat Head Railroad Spikes** of all patterns. **Boiler Rivets, Bolts** of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full. feb 28 **CORBY, GOSSIN & CO.**

**Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.**

**VIA LAWRENCEBURG,**

IN connection with the **Ohio and Mississippi Railroad**. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M., and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago. Office, 31 Main Street, west side, 5 doors north Madison House. Cincinnati, Jan. 31, 1855. [Jaul-17] Agent.

**APPLEGATE & CO.,**

**Booksellers, Publishers, Stationers & Blank Book Manufacturers,  
43 Main St. Cincinnati, C.**

**GEO. D. WINCHELL & BRO.,**

172 Elm Street, bet. 4th and 5th,  
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

**SUCTION & FORCE PUMP**

AND

**Compound Steam Pumping Engine,**

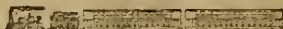
terds. Stationary Fire Engines, Garden Engines and all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

**SILVER MEDAL.** (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

**Norris' Locomotive Works.****PHILADELPHIA.**

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

**LOCOMOTIVES OF SUPERIOR QUALITY.**

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27. **RICHARD NORRIS & SON.**

**Morley's Patent Railroad Chair.**

PATENTED JUNE 2D. 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.  
OR SUMNER SMALL, Boston, Mass.

ap8 F. W. RHINELANDER. EDWIN A. POST.

**RHINELANDER, BOORMAN & CO.,****RAILWAY AGENTS**

AND

**COMMISSION MERCHANTS,**

Supply all material and articles used in the construction and operating of railways

**Bank of Commerce Building, N. Y.**

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq., Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb-5-ly

**Consulting Engineer.**

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

**CHARLES ELLET, Jr., Civil Engineer.**  
No. 258 H Street, Washington, D. C. apr12

**W. G. HYNDMAN'S****Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address **W. G. HYNDMAN,**  
ap23 41 East Second street, Cincinnati, O.

**THOMAS D. STETSON,****Mechanical Engineer,**

AND

**AMERICAN AND FOREIGN PATENT AGENT,**

No. 86 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oct23

**RAILROAD IRON.**

1500 TONS RAILS, 57 lbs. per yard;  
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

**THEODORE DEHON.**  
feb-5-11 10 Wall st., near Broadway, New York.

**ALLEN & NOYES' METALLIC PACKING.****To Whom it May Concern.**

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees. July 14, 1857. jy23-1m

**D. M. CARHART.****TURN-TABLE BUILDER.**

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

**D. M. CARHART,**  
Box 1831, Cleveland, Ohio.

oct29-6m

**T. F. RANDOLPH & BRO.****Mathematical Instrument Makers,**

**Removed to No. 67 West 6th St.**

CINCINNATI, O.























SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01549 3000